

Historic, Archive Document

Do not assume content reflects current
scientific knowledge, policies, or practices.

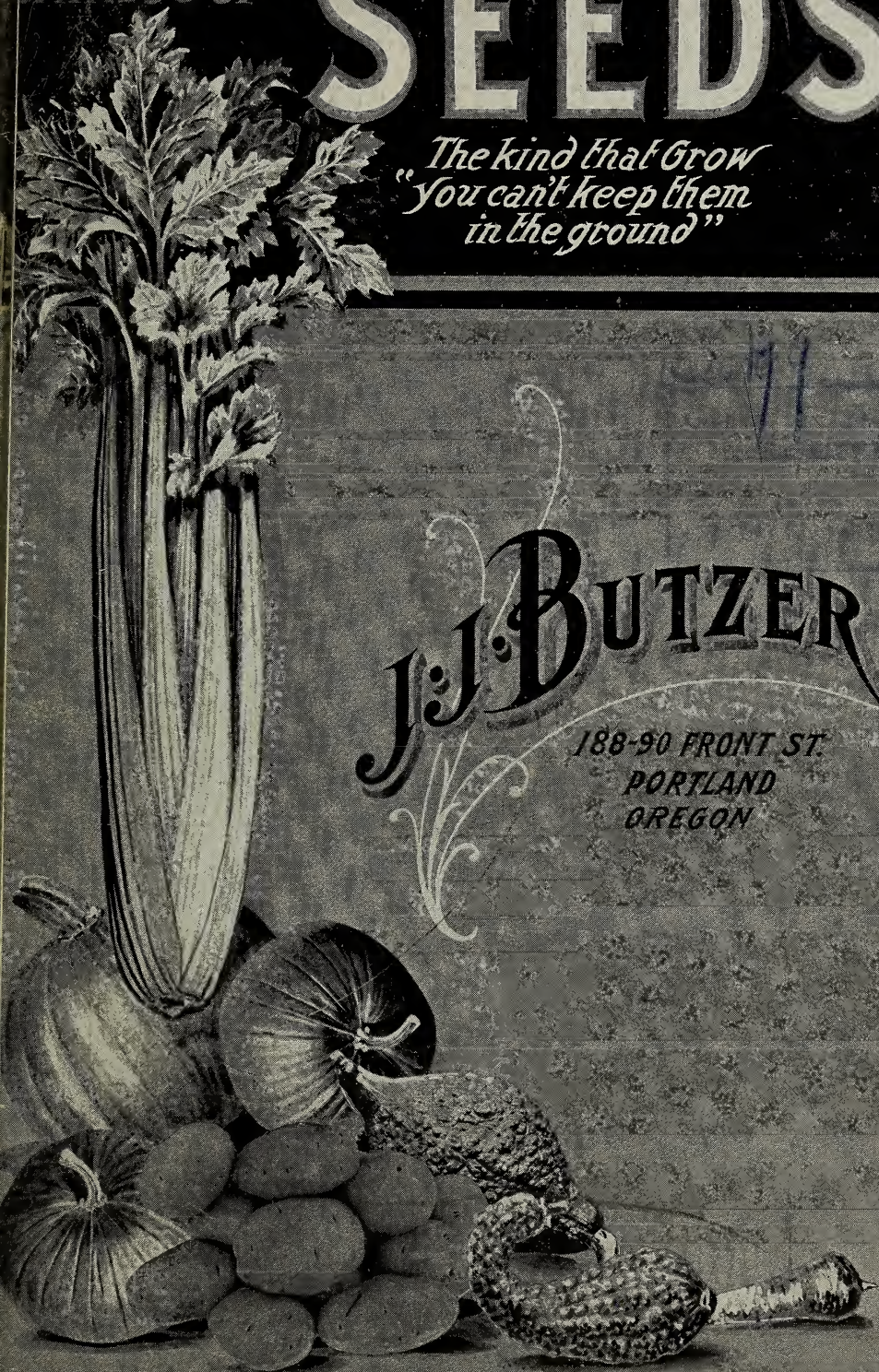
1915
CATALOG OF

SEEDS

*The kind that grow
"You can't keep them
in the ground"*

J. J. BUTZER

188-90 FRONT ST.
PORTLAND
OREGON



To My Patrons:

I take pleasure in handing to my numerous customers my General Seed Catalogue and Price List for the ensuing season. I have endeavored to list those varieties of tested and proven merit rather than place before you a great number of names which often tend to confuse the intending purchaser of seeds. However, I keep in stock all the standard sorts and can fill any order intrusted to me. My motto is

SEEDS THAT YOU CAN'T KEEP IN THE GROUND

EXPANSION.—For several years I have been overcrowded and handicapped for space. But not until this season could I secure more space. I now occupy the two stores 188 and 190 Front Street, with warerooms in the rear. This allows me more room in which to store various varieties of seeds, etc., thereby avoiding the possibility of confusing them.

ALWAYS UP TO DATE. The rapid growth of my business each year is conclusive evidence that my seeds are giving satisfaction, that the care I exercise to guide new settlers of their proper selection of the proper varieties of seed, etc., suited to the soil, the season and the purpose or market for which each crop is intended, all prove my sincerity of purpose to help the grower, be he rancher or gardener, into the proper selection of seeds.

CASH WITH ORDER. Please make remittance with order, thus saving us much extra work during busy season. Express or Postal Money Orders are preferable. Two-cent postage stamps will answer for amounts of \$1.00 and less.

WHEN ORDERING, write your full name very plainly, giving Post Office, Express Office, or Freight Depot, as the case may be, to which you wish the goods sent. If an order wherein we have been given the full and correct address is lost in the mails we will replace same, but if lost through faulty directions given us we cannot duplicate same free. When shipments are made by Express or Freight our responsibility ceases after we have obtained a clear receipt from the transportation companies.


Parcel Post Rates

PARCEL POST RATES are based on **DISTRICTS** and **ZONES**. **THE DISTRICT** includes the office where mailed and the rural routes therefrom.

A RATE OF 5 CENTS for the first pound and 1 cent per pound for each additional pound up to 50 pounds (the district weight limit) is charged between points in districts.

THE 1st ZONE covers a radius of 50 miles from the point of mailing; the rates are 5c for the first pound and 1 cent for each additional pound, up to the limit of 50 pounds.

THE 2nd ZONE covers a radius of 150 miles, and the rate is 5c for the first pound and 1 cent for each additional pound; weight limit of 50 pounds.

 **A WEIGHT LIMIT OF 20 POUNDS APPLIES TO THE 3rd, 4th, 5th, 6th, 7th and 8th ZONES.**

ZONE RATES increase with the distance -- see table.


WHEN YOU ORDER FROM PORTLAND look for the *Zone* that corresponds to the distance you are away. Then note where the weight of your package is marked on the table of rates, on the same line *under your ZONE* will be shown the amount of postage to be added when ordering. We have catalogued the weight of most items mailable by parcel post, and by the aid of the table here shown you can always figure your postage.

SIZE AND WEIGHT

A Parcel Post package may weigh from four ounces to fifty pounds for the first and second zones—with a twenty pound weight limit for third to eighth zones, and must not exceed in size 72 inches in length and girth combined. Four ounces or less will be charged for at one cent per ounce or fraction thereof.

BOOKS.—On and after March 16, 1914, the postage on books weighing 8 oz. or less, will be 1c for every 2 oz. or fraction thereof, and on those weighing more than 8 oz. the regular **ZONE RATES** shall apply.

WEIGHT	1st Zone		2nd Zone	3rd Zone	4th Zone	5th Zone	6th Zone	7th Zone	8th Zone
	Local rate	Zone rate 50 miles	50 to 150 miles	150 to 300 miles	300 to 600 miles	600 to 1000 miles	1000 to 1400 miles	1400 to 1800 miles	All over 1800 miles
1 pound				\$0.06	\$0.07	\$0.08	\$0.09	\$0.11	\$0.12
2 pounds				.08	.11	.14	.17	.21	.24
3 pounds	Local	First and		.10	.15	.20	.25	.31	.36
4 pounds	Zone	Second Zone		.12	.19	.26	.33	.41	.48
5 pounds	Rate 5c	Rate 5 cents		.14	.23	.32	.41	.51	.60
6 pounds	for first	for the		.16	.27	.38	.49	.61	.72
7 pounds	pound	first pound		.18	.31	.44	.57	.71	.84
8 pounds	½c for	and		.20	.35	.50	.65	.81	.96
9 pounds	each ad-			.22	.39	.56	.73	.91	1.08
10 pounds	dional	1 cent for		.24	.43	.62	.81	1.01	1.20
11 pounds	pound	each		.26	.47	.68	.89	1.11	1.32
12 pounds	up to	additional		.28	.51	.74	.97	1.21	1.44
13 pounds	weight	pound up to		.30	.55	.80	1.05	1.31	1.56
14 pounds	limit,	the limit,		.32	.59	.86	1.13	1.41	1.68
15 pounds	50	50 pounds		.34	.63	.92	1.21	1.51	1.80
16 pounds	pounds			.36	.67	.98	1.29	1.61	1.92
17 pounds				.38	.71	1.04	1.37	1.71	2.04
18 pounds				.40	.75	1.10	1.45	1.81	2.16
19 pounds				.42	.79	1.16	1.53	1.91	2.28
20 pounds				.44	.83	1.22	1.61	2.01	2.40

 **These Rates NOW apply to SEEDS, SCIONS, PLANTS, ROOTS, BULBS and CUTTINGS**

The same as to other lines of merchandise. Weight and size within the Parcel Post limit.

The 8th zone rate applies to ALASKA, MEXICO, CUBA, HAWAII, PANAMA and the PHILIP-PINES and allows Full Weight, 20 Lbs.

Postage to Canada on 4th class pkgs. of over 4 oz. and NOT EXCEEDING 4 Lbs. 6 Ozs., go at 8th zone rate.

Novelties

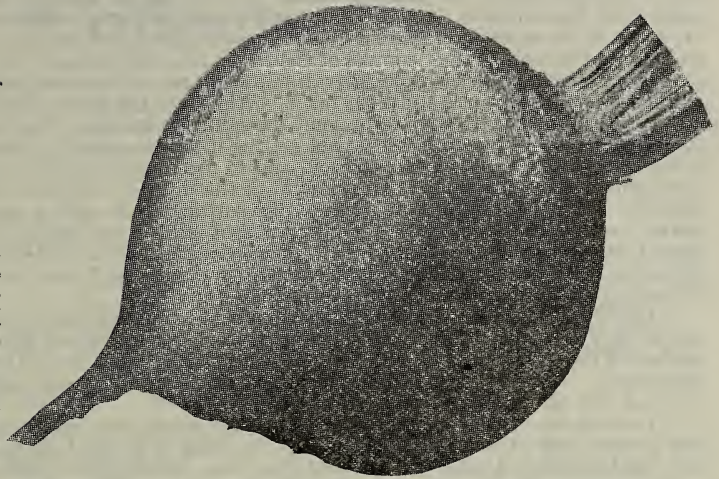
Beet

Butzer's Dark-Leaved Globe Beet.

THE DARKEST FLESHED
ROUND BEET.

Hitherto, the improved selections of turnip-rooted Beet have been wanting in that important essential, a dark leaf. The novelty we offer has not only a dark leaf like the best decorative strains, but is equal in the color of flesh to the Dell's type. These two important features, coupled with its handsome form, place this variety in the front rank of this class of beet.

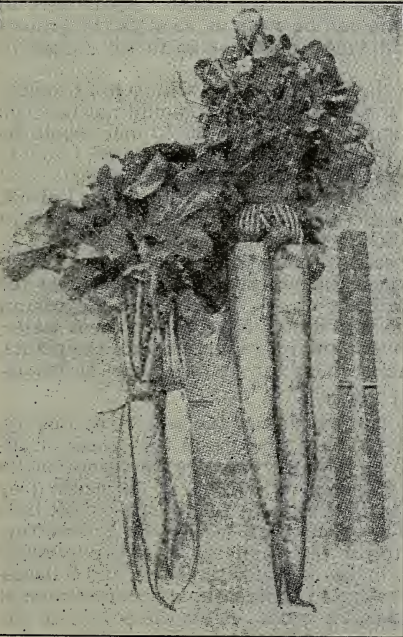
Per pkt., 10c.



Radish

Japanese Summer Radish.—This radish was introduced here by the Japanese last year. Its beautiful white color and mammoth size attracts great attention. It is very tender and the flavor is excellent and mild. It attains perfection in Oregon, growing to eighteen inches in length and three inches in diameter. It is a profitable radish to grow as it sells readily and is relished by all. We have had grown for us a limited quantity of this seed and now offer it at 5c per pkt; oz., 20c; lb., 75c.

Japanese Winter Radish.—This was introduced in the same manner as the Japanese Summer Radish, which it resembles except in size, as you can see in the picture. It is more crisp and of better flavor in the winter season. It is pure white, grows about eight inches long and not as tapering as the larger one. Per pkt., 5c; oz., 20c; lb., 75c.



Winter.

Summer.

Butzer's Boston Market Radish.

A very superior selection, somewhat resembling French Breakfast in shape but shorter and thicker than that variety. The white tip, as will be seen from the accompanying illustration, is well developed and gives this novelty a most attractive appearance. Very early and has a short top.

Per pkt., 10c.



The Kitchen Garden

The soil for a vegetable garden should be free from stones or stumps and easily cultivated. Wet land, that cannot be drained, should be avoided, as all crops suffer more from too much water than from drouth. Land which has a gently rolling or undulating surface, with a southern exposure, is the most desirable for general gardening operations, since it receives the full sunlight and allows the most perfect control of the water that falls upon it. A garden should be cultivated often, as cultivation prevents evaporation and so saves the moisture in it. Water should not be applied unless the crop is suffering for it. Whenever the garden has been irrigated, it should be cultivated as soon as possible to prevent the soil from baking. The water must be applied enough to nicely moisten the land, but avoid getting it water-soaked. The crops should be rotated to avoid insect enemies, to deepen the soil, and to use the plant food in the land to best advantage, since crops vary very much in the amount of the different elements which enter into their composition. Some plants feed largely near the surface, while others take their food mostly from a lower level. Root crops should not follow root crops, nor should vines follow vines for many years in succession on the same land. Nitrogen, phosphorus and potash are the most important elements in the composition of our cultivated plants, and must be furnished to the ground in a great quantity if good crops are expected.

By the proper cultivation of the garden we accomplish three things: (1) The weeds are kept out so they do not shade the young plants, neither take away any plant food or moisture. (2) The surface of the soil is brought into the best condition to resist drouth and to take in all the moisture from rains. (3) The inert plant food in the soil is made soluble by the combined actions of the sun and the air.

In order to secure a good germination of the seeds, they should be sown in mellow soil, and this packed around them just firm enough to bring it in good contact. Unless the seed is carefully and properly placed and covered, the crop cannot get a good start. Seeds will not sprout in the absence of air and, on that account, seeds that are sown too deep fail to come up.

In planting the garden it is important to put all the perennial crops, or all crops maturing at about the same time, together, so as to render the work of cultivating easier. Seeds have to be put in the ground at different times in the spring. Some can be sown as soon as the ground can be worked, while others, such as beans, corn and all vines must not go in till danger of frost is passed and the ground is warm.

Most people sow the seeds too deep, and then blame the seedsmen for selling poor seeds, when the fault is theirs. All small seeds, like cabbage, lettuce, onions, etc., should not be sown deeper than $\frac{3}{4}$ inch, and, in good many cases when the spring is rather wet, $\frac{1}{2}$ inch would be better. Beans will do best if sown about 2 inches, while sweet corn should be covered 1 to $1\frac{1}{2}$ inches deep. Peas are the only crop that will do well if planted more than 2 inches deep.

Insects will attack the vegetable garden and some, as the cut worm, are hard to kill off. The only sure remedy against the cut worm is to envelop the stem of the plant with a piece of paper projecting 2 inches above the ground and one-half inch in the ground.

Fleas, on turnip and cabbage, can be destroyed by using either powdered tobacco, Slug-Shot or Kerosene Emulsion, and worms that eat the leaves will be destroyed by spraying the leaves above and underneath with Arsenate of Lead or Paris Green. Kerosene Emulsion is made by mixing thoroughly 15 to 20 per cent of kerosene with 80 to 85 per cent of clear water. A small piece of hard soap dissolved in it will greatly improve it and make it stick onto the plants. On melon and squash vines 10 to 12 per cent of kerosene is enough or it will burn the leaves.

HOW TO MAKE A HOT BED.

First pile up some fresh horse manure, not taking too much bedding, and wet it thoroughly. In two or three days it must be turned over, throwing the outside manure in the center of the new pile and breaking up all the lumps. In four or five days it will have to be turned again before it is ready to put in the bed. Dig a trench 5 feet 8 inches wide by 24 or 30 inches deep and any length desired. In the trench put the manure that has already been heated, putting a layer of 6 inches at one time, and then wetting it good, and keep putting 6-inch layers and wetting every time till you have two feet of manure, and then top it with 6 inches of well pulverized soil. Then make a frame with one or two-inch boards, 12 inches wide for the back, and 6 inches for the front, and cover with sash 3 by 6 feet. If you cannot get a glass sash, a wooden frame of same dimensions, covered with hotbed cloth, will be almost as good. After the soil is on the manure, the bed will commence to heat up but will be too hot to sow seeds, and it will take about a week before it is safe to sow it. Care should be taken to water the hotbed enough, and ventilate it whenever the weather permits, or the plants will be liable to be damped off and die.

GUARANTEE

Seeds of the best quality are apt to fail through improper treatment by sowing the seed too deep or too shallow, in too wet or too dry soil. They differ greatly as to the temperature required for germination. Some will germinate rapidly at a certain temperature, while others, if sown under the same conditions, are apt to decay, and for all these reasons it is impractical to guarantee seeds. I give no warranty, expressed or implied, as to description, quality, productiveness, or any other matter, of any seeds, bulbs or plants sent out, and will not be in any way responsible for the crop. If the purchaser does not accept the goods on these terms, they are at once to be returned.

J. J. BUTZER.

Butzer's Home Garden Collections

The amateur gardener, not familiar with the different kinds, will find these collections a simple solution of the problem of selection. While the prices of collections are much lower than the regular list, we use only seeds of the highest quality, but being enabled to put them up during leisure time, the saving goes to the buyer. No changes will be made in the assortment. Orders can be filled immediately on receipt.

SMALL VEGETABLE GARDEN

COLLECTION NO. 1, 50c, POSTPAID.

1 pkt. Beet	1 pkt. Cucumbers	1 pkt. Watermelon	2 pkt. Radish (long and turnip)
1 pkt. Cabbage	1 pkt. Lettuce	1 pkt. Onion	1 pkt. Tomato
1 pkt. Cauliflower	1 pkt. Peas	1 pkt. Parsley	1 pkt. Turnip
1 pkt. Carrot	1 pkt. Muskmelon	1 pkt. Parsnip	

MEDIUM VEGETABLE GARDEN

COLLECTION NO. 2, \$1.00, POSTPAID.

½ lb. Peas, Early	1 pkt. Cauliflower	1 pkt. Egg Plant	1 pkt. Parsley
½ lb. Peas, Late	1 pkt. Carrot	1 pkt. Kohl Rabi	1 pkt. Pepper
½ lb. Beans, String	1 pkt. Celery	1 pkt. Leek	1 pkt. Pumpkin
½ lb. Beans, Wax	1 pkt. Sweet Corn	1 pkt. Lettuce	1 pkt. Turnip
1 pkt. Beet	1 pkt. Cucumber	1 pkt. Muskmelon	2 pkts. Radish, Long and Turnip
1 pkt. Cabbage	1 pkt. Corn Salad	1 pkt. Watermelon	1 pkt. Tomato
		1 pkt. Onion	

LARGE VEGETABLE GARDEN

COLLECTION NO. 3, \$2.50, POSTPAID.

1 lb. Peas, Early	1 oz. Carrot, Danvers	1 oz. Lettuce, Curled	2 oz. Radish, Long
½ lb. Peas, Late	1 pkt. Celery	2 pkts. Muskmelon	2 oz. Radish, Turnip
1 lb. Beans, String	½ lb. Sweet Corn	1 pkt. Watermelon	1 pkt. Rhubarb
½ lb. Beans, Wax	2 pkts. Cucumber	1 pkt. Mustard	1 oz. Spinach
1 oz. Beet	1 pkt. Corn Salad	1 pkt. Onion, White	1 pkt. Squash
1 pkt. Brussels Sprout	1 pkt. Egg Plant	1 pkt. Onion, Yellow	1 pkt. Tomato, Early
1 pkt. Cabbage, Early	1 pkt. Kohl Rabi	1 oz. Parsley	1 pkt. Tomato, Late
1 pkt. Cabbage, Late	1 pkt. Kale, Tall Scotch	1 oz. Parsnip	1 oz. Turnip, White
1 pkt. Cauliflower	1 pkt. Leek	2 pkts. Pepper	1 pkt. Turnip, Yellow
1 oz. Carrot, Long	1 oz. Lettuce, Head	1 pkt. Pumpkin	1 pkt. Sage
			1 pkt. Thyme

COLLECTION NO. 4, 50c, POSTPAID.

1 pkt. Beans	1 pkt. Carrots	1 pkt. Lettuce	1 pkt. Sweet Peas (Mixed)
1 pkt. Corn	1 pkt. Cabbage	1 pkt. Muskmelon	1 pkt. Poppy
1 pkt. Beet	1 pkt. Radish	1 pkt. Watermelon	1 pkt. Daisy
1 pkt. Cabbage	1 pkt. Cucumber	1 pkt. Cosmos	1 pkt. Forget-me-not

SCHOOL GARDEN COLLECTION

COLLECTION NO. 5, 25c, POSTPAID.

This Collection is for "SMALL GARDENS for SMALL FOLKS."

These are Smaller Special Packets for School Gardens.

1 pkt. Alyssum	1 pkt. Lettuce	} Twelve Packets of Seeds for 25c and enough to have a dandy School Garden. All for 25c postpaid.
1 pkt. Escholtzia	1 pkt. Onion	
1 pkt. Beets	1 pkt. Parsley	
1 pkt. Carrots	2 pkts. Radishes	
1 pkt. Corn	1 pkt. Swiss Chard	
	1 pkt. Turnip	

In order to further encourage this good work I will give a cash prize of \$5.00 for the best picture of a school garden grown from these seeds. This contest will close July 1st, 1915. Pictures should have the name of the school and principal and person sending it written on the back of photograph.

NOW, SMALL FOLKS, GET BUSY!

Butzer's Reliable Vegetable Seeds

ASPARAGUS

Culture—Beds are usually formed by setting plants one or two years old, which can be procured of us. If you wish to grow plants from the seed yourself, pour hot, not boiling, water on the seed and let stand until cool; pour it off and repeat two or three times with fresh hot water. Then sow in drills one foot apart and two inches deep in light, rich soil. When the plants are well up, thin to about one inch apart and give frequent and thorough cultivation during the summer. If this has been done, the plants will be fit to set in the spring. The permanent beds should be prepared by deep plowing or spading and thoroughly enriching the ground with stable manure or other fertilizer; a moist sandy soil is best. If the subsoil is not naturally loose and friable, it should be made so by thoroughly stirring with a subsoil plow or spade. Set the plants about four inches deep and one to two feet apart in rows four to six feet apart. After the plants are well started, give frequent and thorough cultivation. Early the next spring spade in a heavy dressing of manure, and about one quart of salt and double the quantity of fresh wood ashes to each square rod and cultivate well as long as the size of the plants will permit, or until they begin to die down. The next season the bed may be cut over two or three times, but if this is done, all the shoots, no matter how small, should be cut. After the final cutting, give a good dressing of manure, ashes and salt. Cultivate frequently until the plants meet in the rows. In autumn after the tops are fully ripe and yellow, they should be cut and burned. A bed 15x50 feet, requiring about one hundred plants, if well cultivated and manured, should give the following season an abundant supply for an ordinary family and continue productive for eight or ten years.

Barr's Mammoth—(See illustration)—The stalks are very large, sometimes nearly an inch in diameter, with few scales; the stalks retain their thickness completely up to the top and have close round heads. They are quick growing, tender and succulent. Per pkt., 5c; oz., 10c; ¼ lb., 25c; per lb., 75c, postpaid.

Good strong roots, one-year-old, 50 for 60c; \$1.00 per 100, by mail, postpaid. By express or freight at purchaser's expense one-year-old, 65c per 100; 600 for \$2.50; \$4.50 per 1000. Two-year-old roots, \$1.00 per 100, postpaid.

Columbia Mammoth White—This large stalked strain produces white stalks above the surface, and which are nearly as fine flavored as the best green stalked. Prices of both seed and roots same as for Barr's Mammoth.

Giant Argenteuil—The popular variety in France and a special favorite in the Paris markets. Stalks large and thick. Per pkt., 5c; oz., 10c; ¼ lb., 30c; per lb., \$1.00. Roots at the same prices as quoted for Barr's Mammoth.

Conover's Colossal—The standard variety. Price of seed: Per pkt., 5c; oz., 10c; ¼ lb., 20c; per lb., 60c, postpaid. One-year-old roots, 50 for 60c; 90c per 100, by mail, postpaid. By express or freight at purchaser's expense: 45c per 100; \$4.00 per 1000. Two-year-old roots, \$1.00 per 100, postpaid.

Palmetto—Large thick dark green shoots with a distinctly pointed tip. Both seed and roots at the same prices as quoted for Barr's Mammoth.

Write for special price when larger quantities are wanted than priced.

Artichoke

Artichoke, Ger.

Artichaut, Fr.

Alcachofa, Sp.

Culture—The scales and bottom of flower head are eaten either boiled or raw as a salad. The young suckers are sometimes tied together and blanched, and served in same manner as Asparagus. The plants thrive best in deep, rich soil, where the water will not lodge about them in winter. Plants are set in rows 3 feet apart and 2 to 3 feet apart in the row. The crowns should be covered with coal ashes in winter to shed the water, and over these a good covering of leaves, held in place by a little earth or litter. When spring arrives remove the leaves, but do not disturb the ashes until signs of growth appear, after which the ashes should be spread out a little over the ground. Seeds may be sown indoors and plants potted, same as the Tomato, and set out in May, or can be sown in hills outside, and thinned out to one plant in hill. It makes a good growth the first year, and some may be obtained during August and September; but the next year all plants will flower and continue to do so for years. In two or three years the crowns may get too large, in which case they should be divided into two or four pieces to a hill. This work should be done when growth is about to start in the spring, and they will make good plants and flower the first year.

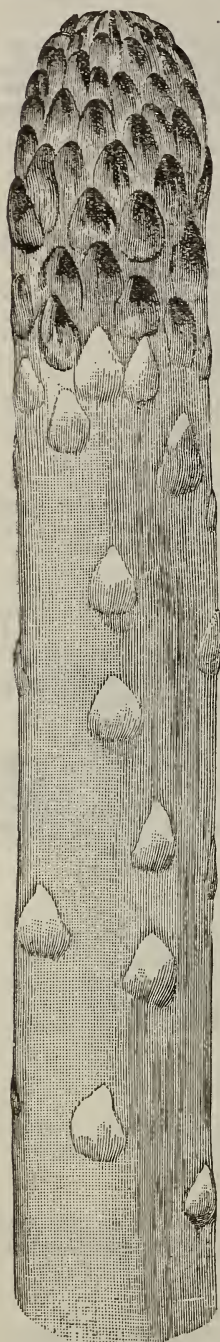
Artichoke Seeds

One ounce will produce about 500 plants.

Large Green Globe. Pkt., 10c; oz., 60c; ¼ lb., \$1.75

Artichoke Tubers Best for Stock Feed

Jerusalem—The Greatest Hog Food Known. Remarkable for their fattening properties. One acre will easily keep 25 to 30 hogs from October until April, except when ground is frozen too hard for them to root. Not necessary to dig them, simply turn in the hogs, they will root them. Cut the eyes as potatoes and plant in rows 3 feet apart and 2 feet apart in the rows, putting one eye to the hill, cover 2 inches deep. Plant in April or May. These are sometimes pickled for table use. Lb., 20c, postpaid; \$2.00 per 100 lbs.



Butzer's Green-Podded Bush Beans

Culture—No crop responds more readily to good soil and cultivation than beans. A light, rich, well-drained loam, which was manured for the previous crop is desirable. If too rank manure is used it is apt to make the plant run too much to vine. Beans are extremely sensitive to both cold and wet, and it is useless to plant them before the ground has become dry and warm. The largest returns will result from planting in drills from two to three feet apart and leaving the plants two to six inches apart in the row. Up to the time of blossoming they should have frequent shallow cultivation, but any mutilation of the roots by cultivation after the plants come into bloom is likely to cause the blossoms to blast and so cut off the crop. The cultivation of beans should always be very shallow and it is useless to expect a crop from a field so poorly prepared.

Varieties should be selected so as to give a succession both of string and green shelled beans. The wax podded varieties will degenerate into a mixture of green wax podded plants unless there is constant attention given to the removing of any green podded plants which may appear in the seed crop, and the constant selection of plants of the highest type for stock seed. [Hence it is especially important to use seed from reliable sources only.

Burpee's Stringless Green Pod

This famous bean is absolutely unequalled! It combines unusual hardness, extreme earliness, and wonderful productiveness with pods of handsome appearance and finest quality. Extra early plantings may be made to produce the earliest crop, and even with later plantings Burpee's "Stringless" is always the quickest to produce pods.

By repeated plantings pods may be had in constant succession from Spring until cut off by heavy frosts in the Fall. Combined with the extra hardness and early maturity, the pods are the finest in quality, of a rich green, very round and straight, five inches long, solidly meaty and broad—deeply saddle-backed, caused by the rounded swell of the fleshy sides. The pods are tender, brittle, and of finest flavor, always entirely stringless, even when fully matured. In a word, all planters now agree that Burpee's Stringless is absolutely unequalled! Pkt., 10c; lb., 25c, postpaid.

Extra Early Red Valentine.—Next to Burpee's Stringless, this is the most popular of all green-podded bush beans. In this improved strain the pods are very fleshy, round, and saddle-backed, with only slight strings. Bushes grow uniformly about fifteen inches in height and produce a large crop. Per pkt., 10c; lb., 25c, postpaid.

Improved Refugee, or 1000 to 1.—Our strain is extra fine. True bush growth, fifteen inches in height, branching freely. The pods are nearly round, pale green, five inches long, tapering to a slender point; quite solidly fleshy, brittle, and mild in flavor, but with slight strings. Rather later than the other green-podded sorts, but extremely prolific. Very popular with canners on account of the handsome appearance of the pods when picked while quite young. Per pkt., 10c; lb., 25c, postpaid.

CANADIAN WONDER.

Canadian Wonder.—This splendid Bush Bean is the largest, most prolific of the green-podded sorts, and is entirely stringless in its early development. Come a little later than the new Stringless Green Pod, but continues in bearing throughout the season, and is excellent shelled green. Per pkt., 10c; lb., 25c, postpaid.

BROAD WINDSOR, OR ENGLISH BROAD.

Broad Windsor, or English Broad.—This is entirely distinct from the common or French bean. The large, coarse pods are borne on stout plants which are coarser, more erect and less branched than the French. Pkt., 10c; lb., 30c.

SHELL BEANS.

Dwarf Horticultural.—Pods are medium length, slightly curved, and when nearly developed are freely splashed with bright red on the yellow skin. The green beans are of good size, tender, and of fine flavor. Any surplus beans not needed for use during the Summer make excellent soup or baking beans for Winter. Per pkt., 10c; lb., 25c, postpaid.

CASTOR BEAN.

Castor Bean.—Used for medicinal purposes and by some claimed to keep moles away. Per pkt., 10c; lb., 35c, postpaid.

Lady Washington.—Sturdy, bushy plant, erect habit. The bean is large, broad and is a great improvement over the old "Navy," being much earlier, a little larger, and a very heavy yielder, being especially adapted to our Western soils, and is entirely free from disease. Bush attains a height of about fourteen inches, and beans mature in September. Per pkt., 10c; lb., 25c, postpaid.

WRITE FOR SPECIAL QUOTATIONS ON LARGE QUANTITIES.



**BURPEE'S
STRINGLESS**

Wax-Podded Bush Beans

Burpee's "Brittle Wax"—The earliest of all Wax Beans! Of such superb quality is might well be called "Best of All!" The bushes are remarkably hardy and extremely prolific, while the handsome fleshy pods are entirely stringless and of the finest quality. We are sure that all who plant Burpee's Brittle Wax—whether for family use or market—will appreciate its unequalled merits as thoroughly as do the originators and ourselves. Per pkt., 15c; lb., 35c, postpaid.

Perfection Wax—Very productive, the handsome large flattened pods are six inches in length, one-half inch broad, sharply pointed, tender and brittle when young, with only slight strings, but not very fleshy. Color of the young pods a rich golden yellow, turning lighter as they mature. Our newer wax beans are so much better that this is no longer entitled to the name "Perfection!" Per pkt., 10c; lb., 25c, postpaid.

Burpee's Saddleback Wax—The plants of good quality: four inches in length, extra productive. The pods are long, nearly straight, well-rounded, and so meaty as to be saddle-backed or creased in the center. The flesh between the beans is solid meat without any open spaces, brittle, always stringless, of a rich golden yellow and finest flavor. Per pkt., 10c; lb., 25c, postpaid.

Davis' White Wax—Immensely productive, bearing large handsome straight pods six inches in length. The pods are, however, tough and with decided strings. The dry seed, being white, is desirable for winter market as a shell bean. Per pkt., 10c; lb., 25c, postpaid.

Rust-Proof Golden Wax—Pods rather flat, but of good quality; four inches in length, half an inch broad, of light golden yellow; quite brittle, with only slight strings when young. Plants stiffly erect, bearing a large crop of fine pods held well above the soil. Per pkt., 10c; lb., 25c, postpaid.

Dwarf or Bush Lima Beans

Fordhook Bush Lima Bean—The only stiffly erect bush form of the popular "Potato" Lima! Both pods and beans are twice the size of Dreer's Bush Lima and more than half again as large as the Challenger Pole Lima. Is fully a third heavier cropper and therefore is bound to entirely displace the Kumerle (Dreer's or Thorburn's) Bush Lima. In season it is from four to six days earlier. Per pkt., 15c; lb., 35c, postpaid.

The New Burpee-Improved Bush Lima—"This is the finest Bush Lima that has ever been introduced. The bush is sturdy in habit and twenty to twenty-four inches high, with large leaves. It bears its beans on long spikes in very prolific clusters well out from the plant. There are from four to seven pods in each cluster, and often as many as eleven. Each pod contains three, four, or five beans and there are more pods containing five than there are containing three beans so that there is an improvement of from one to two beans in each pod, and this, taken with the great number of pods borne, makes the yield enormous. In quality this bean ranks with the very best and the beans are of large size. In earliness it comes between Henderson's and Burpee's Bush, and is about a week earlier than the latter variety. This bean is bound to be the greatest, most popular Bush Lima—a continuous bearer." Per pkt., 15c; lb., 35c, postpaid.

Burpee's Bush Lima—Comes absolutely true from seed. The bushes grow eighteen to twenty inches high, stout growth and always erect, yet branching so vigorously that each plant develops into a magnificent circular bush from two to three feet in diameter. It is an immense yielder, the handsome large pods being well filled with very large

Wardwell's Kidney Wax—Strong upright bush growth, fifteen inches in height; very productive. Pods straight, flat, five inches in length; of a rich golden yellow. Per pkt., 10c; lb., 25c, postpaid.

Burpee's White Wax—Of sturdy, upright growth, the bushes are heavily laden with a magnificent crop of large handsome wax-pods. The pods are straight, of a bright lemon-yellow, brittle, meaty, and entirely stringless at all stages of growth. It is what canners and truckers have been seeking for years—as it combines quantity, quality, and beauty in the pods, which can be used as string-beans until large enough to shell, while the seed, being large and pure white is most desirable for shell beans both for summer and winter use. Per pkt., 15c, lb., 35c, postpaid.

Burpee's New Kidney Wax—Hardier and more prolific than the popular Wardwell's Kidney Wax,—with even handsomer pods, of better quality! The true erect bush plants average twenty-five per cent larger than Wardwell's—when full grown, they reach eighteen to twenty inches in height. There has never been a sign of blight on the handsome dark-green leaves. Under ordinary field culture the plants produce nearly twice as many pods as Wardwell's

The fleshy flat pods are six to seven inches long, one-half inch broad and three-eighths of an inch thick; the color is rich lemon-yellow. The pods are remarkable for their fine flavor, brittleness, and absolute freedom from even a trace of strings—no matter at what stage they are picked. The flesh is also entirely free from any trace of "muslin"—the objectionable paper-like lining found so frequently in many standard older varieties.

The season is the same as Wardwell's Kidney and Golden Wax, but being so much more prolific, will fill the baskets more quickly and present a handsomer appearance on market on account of the fine, long, meaty and brittle pods. The dry seed is the same shape as Wardwell's, but a little more cylindrical and has a trifle less purple coloring at the eye. Per pkt., 15c; lb., 35c, postpaid.

beans, identical in size and luscious flavor with the well-known large Pole Limas. Per pkt., 10c, lb., 25c, postpaid.

Pole Lima Beans


Oregon Pole Lima.—Grows to an average of about five feet, is a strong, thrifty vine and very prolific, bearing continuously until frost, the blossoms bursting from the top shoots in long panicles, while the pods can be seen in every stage of development, to the matured beans at the bottom of the vine. Pods are well filled, having three to five large beans of the finest quality. Gather any time after full maturity.

Oregon Pole Lima can be planted in any garden soil as early as April or late as July. Give the same care and culture as other Beans, and are ready to use when the pods are filled and first begin to ripen. It is not necessary that they should dry on the vines, except for seed. They are at their best when the full green pods begin to turn yellow. Price per pkt., 15c; lb., 35c, postpaid.

Henderson's Early Leviathan—This is the very earliest. It will not only give large lima beans earlier than any other strain, but is also much more productive, both early and throughout the season. It is a strong grower, clinging well to the poles, and is a sure cropper. The pods differ from those of other early pole limas in being straighter and longer. The pods hang out from the foliage in large clusters and contain three or four and sometimes five large beans to the pod. Per pkt., 15c.

King of the Garden—A strong grower and uniformly large podded. The pods frequently contain five to six very large beans. These beans are of excellent quality, easily shelled; of large size and handsome appearance. Per pkt., 10c.

BEANS—Pole or Running



Culture—Pole Beans are even more sensitive to cold and wet as well as to droughts and hot winds than the dwarf varieties, but are of superior quality and productiveness. After settled warm weather set poles four to eight feet long and slanting slightly toward the north, in rows four feet apart and extending north and south, the poles being three feet apart in the row. Set in this way, the vines climb better and the pods are straighter and more easily seen. Around each stake plant five to eight beans two inches deep, and when well started thin to four plants. It is a natural habit of all vines to climb around a pole always in one direction, and they will not do well if an attempt is made to train them to run in the opposite direction. Another plan is to plant in rows thickly enough so that there will be one plant to eight or ten inches. Set posts five feet high firmly at each end of the rows and drive stakes made of 2x2 lumber at intervals of about sixteen feet along the rows. Stretch a wire, size No. 10 or 12, between the posts along each row, and fasten it to the tops of the stakes with wire staples; run a light wire or twine along the bottom about six inches from the ground, fastening likewise to the posts and stakes. Between these two horizontal wires stretch a wire or twine perpendicularly wherever there is a plant; the vines will run up these until they reach the top wire, when they will care for themselves. Another way is to omit the bottom wire and stick small stakes two to six inches in the soil and fasten to top wire.

Old Homestead, or "Kentucky Wonder"—See natural size of pod, engraved from a photograph. The pods seven to nine inches long, are so fleshy that they are greater in width than breadth, being deeply creased or "saddle-backed." They are solidly meaty, stringless when young, and of finest quality. If pods are gathered as they mature, the vines will continue to bear to the end of the season. Per pkt., 15c; lb., 25c, postpaid.

Burger's Green-Pod Stringless—This is earlier than Old Homestead and covers a longer season of productiveness. The pods, borne in clusters, average six to eight inches in length, are uniformly straight, of a rich dark green, and so meaty as to be really "saddled-backed." The pods are as entirely stringless as the popular Burpee's Stringless Green-Pod Bush Bean; they are equally tender and of similar sweet, mild flavor. The dry beans are of a pearly whiteness. Per pkt., 15c; lb., 35c, postpaid.

White Creaseback—A popular early green podded pole bean for snapshorts; of rapid growth and very productive. Pods grow in clusters and are from five to six inches in length, perfectly round, being deeply creased or "saddle-backed." They are solidly fleshy, entirely stringless, and of fine quality. The dry seed is pure white and excellent for winter use. Per pkt., 10c; lb., 25c, postpaid.

"Lazy Wife's"—The pods, of medium dark green color, are produced in great abundance, and measure from four and a half to six inches in length. They are broad and thick; fleshy and entirely stringless. The pods retain their rich, tender, and stringless qualities until nearly ripe, and at all stages are peculiarly luscious. Each pod contains from six to eight round, white beans, which make excellent winter shell beans. Per pkt., 10c; lb., 25c, postpaid.

Golden Cluster—The large flat pods are of a rich golden yellow and of excellent flavor. The dry seeds are thick and pure white. Crop short. Per pkt., 10c; lb., 25c, postpaid.

White Dutch Case Knife—Bears large flat pods early in the season. Being white-seeded, it is excellent to grow dry shell beans for winter. Per pkt., 10c; lb., 25c, postpaid.

Horticultural, Cranberry or Wren's Egg—A popular old variety for either snapshorts or dry shell beans, especially adapted for short seasons and cool locations. Prices same as quoted above for White Dutch Case Knife.

Scarlet Runner—In northern locations where the summers are cool and short, this takes the place of the Large Lima Beans. Plants are of strong quick growth, bearing large sprays of bright scarlet pea-like flowers. When fully ripened the dry beans are of bright scarlet, heavily blotched with purple. Per pkt., 10c.

A NEW POLE BEAN

Kentucky Wonder Wax Bean—In saying that this bean is even more prolific than its green podded namesake, we do not overstep the bounds of truth. It commences to bear when scarcely higher than the average bush variety, and keeps on producing until killed by frost. In some comparatively frostless districts it has continued in bearing from June to December. It is a rampant grower, one vine filling a pole with a mass of vines densely loaded with luscious beans. They are solidly meaty, entirely stringless, and when cooked, deliciously rich and buttery. The seed is brown, closely resembling that of the Kentucky Wonder. Price 15c per pkt.; 35c per lb., postpaid.

KENTUCKY
WONDER

Write for Special Quotations on Large Quantities

Garden Beets

The best results are obtained on a deep rich sandy loam. If wanted very early, sow such sorts as Crosby' Egyptian or Detroit Dark red in hotbeds and transplant, cutting off the outer leaves. For general crop, sow in freshly prepared soil as soon as the ground will permit, in rows eighteen inches apart covering about an inch deep and pressing the soil firmly over the seed. When the plants are well established thin out to four inches apart in the row. For winter use the turnip varieties may be sown in June, so as to mature late in the season; the roots are stored in a cellar and covered with sand or sandy soil to prevent wilting; or they may be kept outdoors in pits such as are used for apples and potatoes. One or two ounces, or single packets of two or three sorts will give a good supply for a large family.

Burpee's Extra Early—Extremely early Of fine globular form; the sweet, tender flesh is of alternate rings of light and dark pink. Per pkt., 5c; oz., 10c; $\frac{1}{4}$ lb., 30c.

Extra Early Egyptian—Grows extra quickly, producing flat smooth turnip roots averaging two inches in diameter. Per pkt., 5c; oz., 10c; $\frac{1}{4}$ lb., 30c, postpaid.

Crosby's Egyptian—Roots are smooth and round in form. They are of finer quality, combined with the same extra maturity. Per pkt., 5c; oz., 10c; $\frac{1}{4}$ lb., 30c, postpaid.

Burpee's Columbia—A superb early main crop beet. The smooth, clean roots grow three to four inches in diameter. Flesh deep blood-red, tender and of rich flavor. The beets are for use almost as quickly as the extra early sorts, and of better quality. It retains its fine quality until the roots have reached full size. Foliage is comparatively small, of a rich bronze color. Per pkt., 5c; oz., 10c; $\frac{1}{4}$ lb., 35c, postpaid.

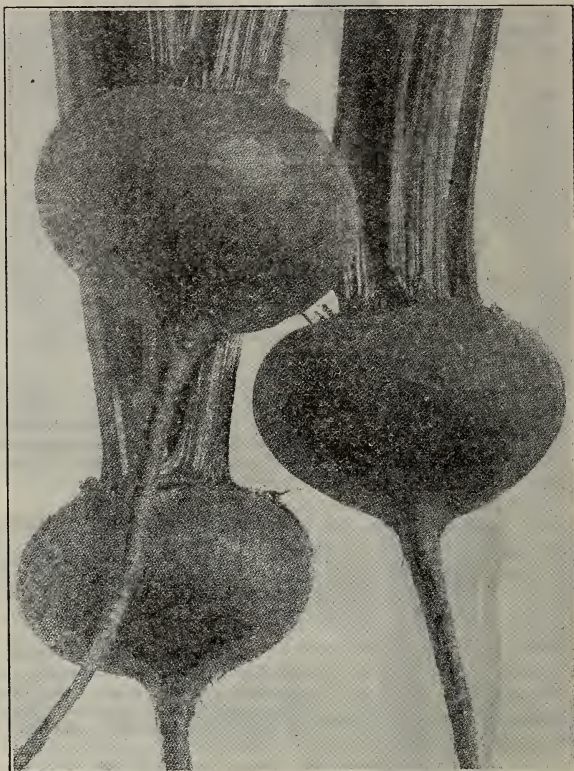
Dark Stinson—This is a finely bred variety for summer market. The roots average two and half inches in diameter, with richly colored leaves only five inches in length. Beets are smooth and regular in form, with small tap-root. Flesh is fine grained, free from any woodiness, even when fully grown, and is of dark red coloring. Per pkt., 5c; oz., 10c; $\frac{1}{4}$ lb., 30c, postpaid.

Crimson Globe—Skin smooth and form regular. The flesh is a deep purplish crimson, slightly "zoned," sweet and tender. The foliage is small, of a rich bronze-purple. Pkt. 5c; oz., 10c; $\frac{1}{4}$ lb., 35c.

Burpee's Improved Blood—This is an improved strain of the old Blood Turnip Beet, having smooth round roots of medium size with dark red flesh, fine grain, very sweet, and retaining its deep coloring when cooked. Tops are small and of uniform growth, the leaf, stems, and veinings being a dark red. It grows quickly and is of superior quality. Per pkt., 5c; oz., 10c; $\frac{1}{4}$ lb., 30c.

Dewing's Improved—Quite early, round turnip-shaped, of good size, with deeply colored flesh. Per pkt., 5c; oz., 10c; $\frac{1}{4}$ lb., 25c.

Edmand's Early—The beets are of round form, very smooth, extra early, and of good marketable size. Skin and flesh deep blood-red; very sweet. Per pkt., 5c; oz., 10c; $\frac{1}{4}$ lb., 30c, postpaid.



THE BEET FOR THE NORTHWEST
DETROIT DARK RED

Detroit Dark Red—Form globular or ovoid. Smooth roots, with small tops; skin blood-red; flesh dark red, zoned with a lighter shade, tender and sweet. Per pkt., 5c; oz., 10c; $\frac{1}{4}$ lb., 25c.

Eclipse—Extra early, round, smooth, blood-red roots. Popular both for market and the home garden. Per pkt. 5c; oz., 10c; $\frac{1}{4}$ lb., 30c.

Early Model—Extremely early, of perfect globe shape and finest quality. The foliage is very small. The beets are always smooth and of the deepest blood-red color, while they quickly attain a good size. Early Model is sure to please all planters on account of its superlative excellence. Per pkt., 10c; oz., 15c; $\frac{1}{4}$ lb., 40c.

Bastian's Half-Long Blood—The roots are shaped like an olive, of large size and have dark red flesh which retains its tenderness until late in the season. Per pkt., 5c; oz., 10c; $\frac{1}{4}$ lb., 30c, postpaid.

Long Smooth Blood Red—Roots long and slender, penetrating the soil deeply, but seldom growing more than two inches in diameter. Rather late in maturing, but are excellent keepers when stored for winter use. Per pkt., 5c; oz., 10c; $\frac{1}{4}$ lb., 25c, postpaid.

WRITE FOR SPECIAL QUOTATIONS ON LARGE QUANTITIES

Swiss Chard or "Spinach Beets"

SHOULD BE IN EVERY GARDEN



"LUCULLUS,"—
THE NEW
SWISS CHARD.

Lucullus—The plants grow to a height of two to two and one-half feet. The stalks are as thick and broad as those of rhubarb, being one and one-half inches broad, heavily ribbed and from ten to twelve inches long below the leaf. These stalks are delicious when cooked and served in the same manner as asparagus.

In the old type of Swiss Chard the leaf portion is smooth, broad and rounded at the upper end; in the new Lucullus the leaves are larger and sharply pointed at the top, while the texture is heavily crumpled or "savoyed," more crisply tender and of finer flavor. The leafy portion of the foliage is cooked and served in the same manner as spinach. The leaves and stalks served as separate vegetables afford two distinct dishes from the same plant at one time. Per pkt., 10c; oz., 15c; $\frac{1}{4}$ lb., 40c; per lb., \$1.25, postpaid.

Large-Ribbed White—This variety does not make edible roots like the regular garden beets, but is grown for the broad white leaf-stalks, which are bunched and cooked in the same manner as asparagus, and make a delicious summer vegetable. The young leaves may be gathered also and cooked like spinach. Per pkt., 5c; oz., 10c; $\frac{1}{4}$ lb. 25c; per lb., 75c, postpaid.

Sugar Beets and Mangel Wurzel

By express or freight, from all mail prices deduct 10c per lb.

Danish Improved Sugar—Roots of thick oval form, make a large bulk of crop. They are rich in sugar and most desirable for stock feeding. Bright green foliage with leaf stalks and skin shaded with pink. Per pkt., 5c; oz., 10c; $\frac{1}{4}$ lb., 25c; per lb., 70c, postpaid. By express, 60c per lb.

Lane's Imperial Sugar—This beet will yield almost as much in bulk as the best mangels, and contains a large percentage of sugar. The roots are smooth, broad at the shoulder and gradually taper to the base. Crisp snow-white flesh. Per pkt., 5c; oz., 10c; $\frac{1}{4}$ lb., 20c; per lb., 55c, postpaid. By express or freight, not prepaid: 45c per lb.

Wanzleben Sugar—This is the variety so extensively planted for sugar factories. Per pkt., 5c; oz., 10c; $\frac{1}{4}$ lb., 20c; per lb., 50c, postpaid.

Giant Half-Sugar—The roots average ten to twelve inches, and the outline is that of a broad thick wedge. The upper portion is of a soft bright pink, shading lighter toward the bottom where the lower third for about one-third the length is white. The flesh is pure white, firm, and very sweet. Per pkt., 5c; oz., 10c; $\frac{1}{4}$ lb., 25c; per lb., 60c, postpaid.

Golden Tankard—A smooth yellow-fleshed mangel, the roots are of large diameter, tapering quickly at the bottom, which is quite broad, with only a small tap-root. It grows largely above the soil and is easily harvested. It yields an enormous bulk on good land, and can be grown closely in rows. This is decidedly the best of all these four mangels for stock feeding. Per pkt., 5c; oz., 10c; $\frac{1}{4}$ lb., 20c; per lb., 50c, postpaid. By express or freight, not prepaid: 40c per lb.; 10 lbs. or more at 35c per lb.

Golden Giant, or Yellow Leviathan—Fine large roots, growing half above the surface. Skin a rich golden yellow; flesh white, firm and sweet. A fine root, easily lifted, producing enormous crops, and is an excellent keeper. Per pkt., 5c; oz., 10c; $\frac{1}{4}$ lb., 20c; per lb., 50c, postpaid.

Mammoth Long Red—The roots grow one-half above the surface and are sometimes two feet in length by six inches in diameter. Dark foliage; skin bright red; flesh white, veined with rose-pink. Per pkt., 5c; oz., 10c; $\frac{1}{4}$ lb., 20c; per lb., 60c, postpaid. By express or freight, not prepaid, 50c per lb.; 10 lbs. at 40c per lb.

Orange Globe—Globed-shape roots six to eight inches in diameter. Skin rich orange; flesh white with lemon-yellow rings; sweet and solid. Pkt., 5c; oz., 10c; $\frac{1}{4}$ lb., 20c; per lb., 50c, postpaid.



WRITE FOR SPECIAL QUOTATIONS ON LARGE QUANTITIES



BROCCOLI.

BROCCOLI

This is a plant bearing heads resembling those of the cauliflower, but more hardy, and gives excellent results in cold northern localities. We do not consider it of any value in warm or dry localities, nor as fine in quality as the cauliflower.

Butzer's Large White French.—The finest of all Broccoli. This grand new strain introduced by us is a sure header of immense size and finest quality, and is ready for market in February. The large, solid handsome, white heads remain in good condition longer than other varieties. Per pkt., 10c; oz., 40c; $\frac{1}{4}$ lb., \$1.25.

St. Valentine.—This is one of the best. Per pkt., 10c; $\frac{1}{4}$ oz., 50c; 1 oz., \$1.50.

BRUSSELS SPROUTS

Brussels Sprouts are highly esteemed for boiling during the late Fall and Winter months. The "sprouts" resemble miniature cabbages growing closely on the stalk of the plant.

Long Island Improved—The finest strain of "Sprouts" grown for the New York market. We offer the choicest Long Island grown seed. Per pkt., 10c; oz., 35c; $\frac{1}{4}$ lb., \$1.00; per lb., \$3.50 postpaid.

Perfection.—The plants grow about two feet in height and the stems are thickly set with the sprouts which grow one or two inches in diameter. Per pkt., 5c; oz., 25c; $\frac{1}{4}$ lb., 75c; per lb., \$2.50, postpaid.

Paris Market.—This is a half-dwarf strain, not so tall as the preceding, but bearing a large crop of handsome round hard sprouts. Per pkt., 5c; oz., 30c; $\frac{1}{4}$ lb., 85c; per lb., \$3.00.

CORN SALAD

Vetticost, or Lamb's Lettuce.—A delicious salad. The best variety cultivated. The proper time for sowing is in the Fall, but sown early in Spring, in rows nine to twelve inches apart, it is fit for use in from six to eight weeks. Cover with hay or straw to protect through the Winter. One ounce of seed to 15 square feet. Per pkt., 5c; oz., 10c; 2 oz., 15c, postpaid.

CRESS

Fine Curled Peppergrass.—Quick growing, finely cut and feathery, like a good parsley; growth dwarf and compact; ornamental, crisp and pungent; very refreshing. Per pkt., 5c; oz., 10c; $\frac{1}{4}$ lb., 20c; per lb., 55c, postpaid.

Water Cress.—Highly esteemed as a salad during the Spring and Fall, also used as a garnish for meats during the Winter. Seed may be started readily in pans or boxes of very moist earth, and the young plants transplanted to shallow water. Per pkt. 10c; oz., 35c; $\frac{1}{4}$ lb., \$1.00; per lb., \$3.50.

CHIVES—Schnittlauch

Chives are perfectly hardy perennial plants of the onion type, and are grown exclusively for their small leaves, which are produced freely very early in the Spring, for giving a mild onion flavor to various dishes. They are used especially in flavoring the small German sausages. When planted in small clumps in any common garden soil, they will grow rapidly and in time increase so as to render division necessary. The tops appear early in the Spring, and can be shorn off close to the ground as needed. If not allowed to flower, they will produce much longer. Per bunch, postpaid, 25c.

Burpee's Danish-Prize.—A very fine strain. The plants are of strong robust growth. The stalks are large, thick and close-joined, so that the sprouts set thickly on the stalk. The sprouts develop for nearly the entire height of the stalk at about the same time—consequently a very large crop can be gathered. Even the sprouts formed at the base of the stalk are tightly folded; they are quite as fine and solid as those higher up. Per pkt., 10c; $\frac{1}{2}$ oz., 20c; oz., 35c; $\frac{1}{4}$ lb., \$1.00; per lb., \$3.50, postpaid.



CORN SALAD

CHICORY

The roots, dried, cut in thin slices, roasted and ground, are used largely as a substitute for coffee. The leaves make an excellent salad for early Spring.

Large-Rooted or Coffee—Per pkt., 5c; oz., 10c; $\frac{1}{4}$ lb., 20c; per lb., 65c.

CHERVIL

Can be planted any time in the early Spring. The leaves should be kept cut, and if not allowed to run to seed, will keep green for a long time. Is more finely curled and handsome than parsley, and makes an excellent plant for garnishing.

Curled.—Very finely curled, somewhat resembling parsley and used in same manner. Per pkt., 5c; oz., 10c; $\frac{1}{4}$ lb., 30c; per lb., \$1.00.

DANDELION

An easily grown plant, now much esteemed for greens, which are cooked like mustard and spinach. Sow the seed in May or June on good rich soil, and thoroughly cultivate when the leaves will be ready to cut the following Spring. An ounce will sow 200 feet of row.

Improved Large Leaved.—The largest leaved and best cutting variety. Per pkt., 10c; oz., 75c; $\frac{1}{4}$ lb., \$2.00.

CABBAGE



Culture—The requisites for complete success are: First, good seed; in this crop the quality of the seed used is of the greatest importance; no satisfactory results can possibly be obtained when poor seed is planted. Second, rich, well-prepared ground. A heavy, moist and rich loam is most suitable. Third, frequent and thorough cultivation. The ground should be highly manured and worked deep. Cabbage is grown all over the country and specific directions regarding the time and methods of planting applicable to all localities cannot be given. In general, north of the 40th parallel the early sorts should be sown very early in hotbeds, hardened off by gradually exposing them to the night air and transplanted as early as the ground is in good condition, setting eighteen to thirty-six inches apart, according to size of variety. South of the 40th parallel, sow about the middle of September, or later, according to latitude, transplanting into cold frames if necessary to keep through winter and setting in open ground as early as possible in the spring.

The late autumn and winter varieties may be sown from the middle to the last of spring and transplanted when four to six inches high. If the weather and soil is dry, the late sowing should be shaded and watered in order to hasten germination, but it is important that the plants should not be shaded or crowded in the seed bed, or they will run up weak and slender and will not endure transplanting well.

First Early Sorts

Extra Early Express—The earliest heading cabbage in cultivation. It produces pointed hard heads of good size, which are ready a week earlier than those of the Jersey Wakefield. Also sold as "Lightning" and under a number of other fancy names. Per pkt., 5c; oz., 20c; ¼ lb., 60c; per lb., \$1.75, postpaid.

Early Jersey Wakefield—The best first-early oblong-headed cabbage. The heads are uniformly hard and solid. They are pyramidal in form, generally pointed at the end, with but few outside leaves. The outer leaves are unusually thick and heavy, and it is thereby enabled to stand more cold weather without injury when carried through the winter, either in the open ground in the south or in cold-frames in the North. Per pkt., 5c; oz., 20c; ¼ lb., 60c; per lb., \$2.00, postpaid.

One of the most successful eastern market gardeners recommends sowing cabbage for family use as follows: At the desired time sow the seed in hills, six to twelve seeds in a place, and after the plants are of sufficient size, thin to a single plant to the hill, and cultivate as usual. This is a very simple method and in some cases is very successful.

Cabbage should be hoed every week and the ground stirred as they advance in growth, drawing up a little earth to the plant each time until they begin to head, when they should be thoroughly cultivated and left to mature. Loosening the roots will sometimes retard the bursting of full-grown heads.

Of late years many crops of early cabbage have been destroyed by maggots at the roots. The best remedy seems to be to remove the earth from around the stem and apply an emulsion of kerosene made as follows: Add one quart of kerosene oil to two quarts of boiling soft soap which has been thinned to the consistency of cream. Stir the oil thoroughly by churning or other method until it has united with the soap and forms a cream-like substance. Then dilute with five times as much water. Tobacco dust, ashes, slacked lime and coal dust are also recommended as preventives, and with us have proved valuable in the order named. These are scattered about the plants leaving one here and there untreated for the flies to congregate around and deposit their eggs upon, when that plant should be pulled up and destroyed.

The cabbage worms which destroy the leaves and heads later may be killed by dusting with pyrethrum powder, slug shot, or Paris green. The last two are poisonous, and should not be used in large quantities, or late in the season; however, should their use be necessary, care should be taken to remove the outside leaves before the heads are used.

If the disease called club root should get a footing, do not plant the land with any of the cabbage family for a year or two. This is usually an effective remedy.

To preserve cabbage during winter, pull them on a dry day, and turn them over on the heads a few hours to drain. Set them out in a cool cellar, or bury them in long trenches in a dry situation, covering with boards or straw, so as to keep out frost and rain.

A great many of the varieties of cabbage are simply strains, rather than distinct sorts, and are really the same as some older and better known kinds. We do not know of a single variety offered in this country which we have not seen both in trial and in fields, and we are confident that every good quality can be found in a greater degree in the varieties we offer than in any other kinds.

Large Wakefield or Charleston—The heads are of similar form, although not so pointed, but of equal solidity as the original Jersey Wakefield, while they grow half again as large, reaching full size about ten days later. Per pkt., 5c; oz., 25c; ¼ lb., 75c; per lb., \$2.50 postpaid.

Early Winnigstadt—The heads are of the same size as the Jersey Wakefield, but more sharply pointed in form and not so early. The leaves are rich dark green, slightly glossy, most tightly folded, the heads being the hardest of any early cabbage. By reason of its great solidity it is also a popular variety to plant in the summer for winter use or cutting for kraut. Per pkt., 5c; oz., 15c; ¼ lb., 50c; per lb., \$1.50, postpaid.

PARCEL POST RATES SEE COVER PAGE

CABBAGE



New Early Cabbage—Copenhagen Market

New Early Cabbage—Copenhagen Market—This superb new Cabbage has created quite a sensation during the past season. It is undoubtedly without a rival as the finest large round-headed early Cabbage in cultivation. The type is thoroughly fixed, the heads maturing all at the same time—(this being a great consideration to Market Gardeners, entailing less labor in harvesting the crop and allows the ground to be cleared at the first cutting). The heads average about ten pounds each in weight, and very solid, with small core and of fine quality. It matures as early as Charleston Wakefield and will give a much heavier yield per acre than that popular variety. The plant is short-stemmed, the heads being produced almost on the ground level. The leaves are light green, rather small saucer-shaped, and always tightly folded. The plants, therefore, can be set closer than is usual with varieties of similar size. Unfortunately, the stock of seed [all grown

in Denmark] is very limited. Per pkt., 10c; oz., 75c, postpaid.

Enkhuizen Glory—A new valuable second-early Cabbage that is becoming immensely popular. It produces fine marketable heads fully as early as our famous *Allhead Early*—but round or ball-like in form. The heads are very solid, with but few outer leaves—and of such compact growth as to permit quite close planting—thus increasing the yield of a given area. The heads are of medium size (weighing from six to eight pounds trimmed), tender and of fine flavor. They keep well when put away and consequently Enkhuizen Glory is valuable also for sowing later in the season for early Winter use. Plants set out mid-Summer will produce fine heads before cold weather. Per pkt., 10c; oz., 40c; 2 oz., 75c; ¼ lb., \$1.25; per lb., \$4.00, postpaid.

Order early as last season we could not supply the demand.

CABBAGE PLANTS SEE PAGE 48

CABBAGE

SECOND EARLY OR SUMMER SORTS



ALLHEAD EARLY

Burpee's Allhead Early—The earliest of all large cabbage, and considerably larger than any other early summer cabbage that is equally as early. The deep flat heads are remarkably solid and the most uniform in color, form and size of any variety. The hard heads grow so free from spreading leaves that fully one thousand more heads than usual with large cabbage can be obtained to the acre. It is really an all-the-year-round cabbage, being equally good for winter. It is undoubtedly the best second-early cabbage—and we know all varieties. We regret that it is now sold under a number of names by other houses, such as Faultless Early, Solid South, Eclipse, etc. If planters everywhere only knew the excellence of Burpee's Allhead Early Cabbage, even our large supply of seed would not suffice to meet the demand. It is undoubtedly altogether unequaled as an early summer cabbage, and is fully as good for winter use, being really an all-the-year-round cabbage. Per pkt., 5c; oz., 25c; postpaid.

Fottler's Brunswick—Of dwarf compact growth, the solid flat heads rest on the soil, while the few outer leaves grow closely about the heads. The foliage is a light bluish green. The heads are uniformly "hard and solid." Good both for intermediate and winter use. Per pkt., 5c; oz. 20c; ¼ lb., 65c; postpaid.

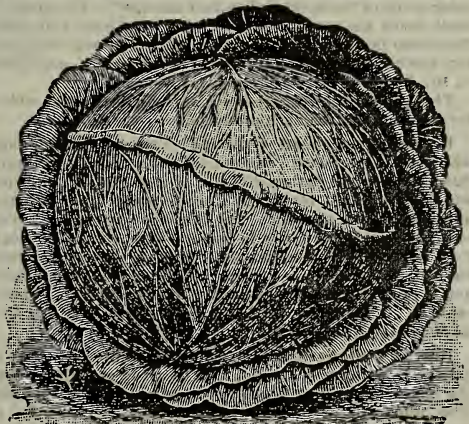
Burpee's Early Stonehead—A most distinct type which is especially adapted for cool locations. It generally matures after our famous Allhead Early, but in some seasons and localities is almost as early as the Jersey Wakefield. The plants are of low growth, with spreading saucer-like outer leaves, making a total diameter of two feet. The heads are deep through and smoothly rounded on the top as distinct from the flat type. The heads are exceptionally hard and solid, of great weight, and stand a very long time before bursting. Per pkt., 5c; oz., 25c; postpaid.

Early Dwarf Flat Dutch—A well-known strain, popular for the summer, but not equal to Burpee's Allhead Early. Per pkt., 5c; oz., 20c; ¼ lb., 50c.

First-Early or "Eureka"—This early flat-heading cabbage is similar in growth and season to the popular Early Jersey Wakefield. It has a larger head and is about a week later than Early Baseball planted at the same time. It is slightly earlier than Burpee's Allhead Early, but the heads are not so large nor will they stand so long after heading, as, like the parent Wakefield, the hard solid heads

burst open soon after they are fully developed, hence they should be marketed as soon as they reach full size. Per pkt., 10c; oz., 30c; 2 oz., 50c; ¼ lb., 85c; per lb.; \$3.00, postpaid.

Burpee's Early Baseball—This is the earliest of all flat or round-head cabbages. Fully as early as Jersey Wakefield. The round heads are as "solid as a baseball," and average five to seven inches in diameter. Per pkt., 5c; oz., 30c; ¼ lb., 85c; per lb., \$3.00, postpaid.



EUREKA

Early Summer—Large, solid, round, flattened, compact heads of excellent quality; the plant has a peculiar bluish tinge. Per pkt., 5c; oz., 20c; postpaid.

Succession—This popular second-early sort is about ten days later than Henderson's Early Summer, larger in growth and heads more uniform. It is an excellent keeper and in color an attractive light green. Per pkt., 5c; oz., 25c; postpaid.

All Seasons—The heads are extremely hard and solid, round, flattened on top, and ready to market nearly as early as Early Summer, while considerably larger in size. It is called "All Seasons" because it is as good for autumn or winter as for early summer. Per pkt., 5c; oz., 20c; ¼ lb., 60c; per lb., \$2.00 postpaid.

WRITE FOR SPECIAL QUOTATIONS ON LARGE QUANTITIES

CABBAGE

LATE or AUTUMN and WINTER SORTS

Danish Roundhead—Has given such splendid satisfaction to growers for winter market that we could fill pages with enthusiastic letters from pleased planters.

The heads average larger in size than those of the Ballhead, maturing about two weeks earlier, and are set on shorter stalks. They are extremely hard and solid, with interior leaves blanched to the purest whiteness; sweet flavor and crisp tender texture.

The great weight of the heads has been noted by visitors to Fordhook. When heads were cut from the stalks to show the distinctly round form, the usual comment was, "hard as a bullet and heavy as lead." The new Danish Roundhead has less outer foliage and is better able to resist blight than Danish Ballhead, being in most sections quite as vigorous in growth during the hot summer months as the best American types. Per pkt., 5c; oz., 30c; $\frac{1}{4}$ lb., \$1.00; per lb., \$3.00, postpaid.

Danish Ballhead—Our Danish seed is absolutely unequalled! It is esteemed for winter use because of the great solidity and excellent keeping qualities of the heads. From repeated trials, as well as from the experience of many customers purchasing our original Danish-grown seed, we know that this selected strain surpasses in even growth and heading, as well as in uniform size and solidity of heads, any other stock of "so-called Hollander Cabbage." The magnificent heads are nearly round in form, very hard and solid; they keep in finest condition when buried through the winter, coming out solid in spring. Per pkt., 5c; oz., 30c; $\frac{1}{4}$ lb., 85c; per lb., \$2.50, postpaid.

This price is for our imported Danish-grown seed, which is the best that Denmark produces.

Burpee's Surehead Cabbage—This famous cabbage was first introduced thirty-five years ago. It produces large round flattened heads, of the Flat Dutch type, and is remarkable for its certainty to head. It is all head and always sure to head. The heads are remarkably uniform, extremely hard, fine in texture, and ordinarily weigh from ten to fifteen pounds each. It is very sweet flavored, has but few loose leaves, keeps well, is good for shipping, and is just the variety and quality to suit all lovers of good cabbage. Per pkt., 5c; oz., 25c; $\frac{1}{4}$ lb., 75c; per lb., \$2.50, postpaid.

Burpee's Short-Stem Drumhead Cabbage—This is extremely uniform in heading and dwarf in growth, so that the largest number of heads can be raised on a given area. The heads appear to rest on the surface of the soil. It grows with little outer foliage, the leaves all folding in closely about the head, which is extra hard. With good cultivation heads attain a weight of twenty to thirty pounds, and are of the finest quality. Per pkt., 5c; oz., 25c; $\frac{1}{4}$ lb., 75c; per lb., \$2.50.

Acme Flat Dutch—This is a distinct strain of quick growth and early maturity, so that it can be grown in a shorter season, or a good crop can be secured by a later planting. Well-grown heads measure thirteen inches across and weigh from ten to twelve pounds. They are solid, fine grained, and of excellent flavor. Per pkt., 5c; oz., 20c; $\frac{1}{4}$ lb., 60c; per lb., \$2.00.

Danish "Round-Red"—This grand novelty produces round or ball-shaped heads of great solidity and intensely deep rich coloring. The plant is of strong compact growth.



ROUNDHEAD

The heads are perfectly round, from six to eight inches in diameter. The leaves composing the head are of an unusually deep purplish red; this rich coloring extends to the center of the head only showing a small portion of white when cutting across the veins and tissues. The extra dark coloring, remarkable hardness and large size of heads make it an excellent market type, as well as most desirable for the house wife in slicing for slaw, salads, etc. Per pkt., 10c; $\frac{1}{2}$ oz., 35c; oz., 60c; 2 ozs. for \$1.00; $\frac{1}{4}$ lb., \$1.75.

Mammoth Rock Red—While late in maturing, this is the largest heading of all deep red varieties. In good soil the heads will average ten pounds. Per pkt., 5c; oz., 25c; $\frac{1}{4}$ lb., 75c; per lb., \$2.50.

Premium Flat Dutch—An improved strain of the old Large Late Flat Dutch type. Highly esteemed. Pkt., 5c; oz., 20c; $\frac{1}{4}$ lb., 60c; per lb., \$2.00.

Burpee's Late Stonehead—A superb sure heading winter cabbage of most distinct type. The plants are of strong sturdy growth; the head is surrounded by a spreading circle of large rounded blue-green leaves. These leaves serve as a saucer to catch light rains or heavy dews and deliver them around the stalk to the roots. The stem is short, and the large round heads are "solid as stone." From their great solidity they keep well when stored for winter use. Per pkt., 10c; oz., 25c; $\frac{1}{4}$ lb., 75c; per lb., \$2.50, postpaid.

Autumn King, or World-Beater—An extremely large and solid heading variety. The plant is of extra strong growth, with dark bluish-green leaves growing closely about the large flattened heads. In good soil it will produce heads of enormous size, but, of course, requires a longer season for growth than do the smaller varieties. With us, seed sown the first of June will produce fine heads in time to put away for the winter. Per pkt., 5c; oz., 20c; $\frac{1}{4}$ lb., 60c; lb., \$2.00, postpaid.

Perfection Drumhead Savoy—This is the hardest heading and best all-round Savoy. Plants are of strong growth, having only a moderate amount of outer foliage growing closely about the large solid round heads. Heads beautifully blanched and of the finest flavor. Per pkt., 5c; oz., 20c; $\frac{1}{4}$ lb., 60c; per lb., \$2.00.

CARROTS



The carrot is one of the most wholesome and nutritious of our garden roots, deserving to be more extensively used for culinary purposes, and we urge our readers to give some of the early table sorts a trial. For feeding stock, especially horses and milch cows, the carrot cannot be surpassed, and it should be more largely grown by farmers for this purpose.

Culture—While sandy loam made rich by manuring the previous year is the best soil for the carrot, any good land if thoroughly and deeply worked will produce satisfactory crops. When possible to do so, it is advisable to sow as early in the spring as the ground is fit to work, though good crops may, in this latitude, be grown from sowings as late as June 15, but success from such late planting is uncertain. For table use sow the smaller kinds as early as practicable in rows 16 to 18 inches apart. For field culture, prepare the ground thoroughly and sow in drills 18 to 24 inches apart, using from one and one-half to three pounds of seed to the acre. Cover one-half to one inch deep and see to it that the soil is pressed firmly above the seed. As soon as the plants appear, use the cultivator or wheel hoe. Do not let the weeds get a start. Thin the smaller table sorts from six to eight to the foot, and the field varieties from four to six inches apart in the row. For winter use, gather and store like beets or turnips.

Our stocks are true to type, grown from selected transplanted roots, and will be found superior to the cheaper California-grown seed.

The Golden Ball is the smallest and earliest of all, closely followed by the Early Scarlet Horn, which is about three inches long and decidedly stump-rooted.

Oxheart and Chantenay, or "Model," are five to six inches long; Chantenay is the longer, but both are thick through, decidedly stump-rooted, and of finest quality. Half-Long Scarlet is more slender, but also stump-rooted. The true Danvers is a popular rich orange colored carrot, six inches long, of medium size, and with tapering roots, blunt at the end. The St. Valery and Improved Long Orange are both long and rather slender; they need a light soil for successful growth and harvesting.

While those in the list at bottom of page are the varieties chiefly grown for stock feeding, on account of their great productiveness, we would call attention also to the fine feeding value, as well as the greater ease in harvesting, of a choice table variety like the Chantenay, Oxheart or Danvers. The seed costs but little more, and the crop is available for market if opportunity offers.

CARROTS—BEST GARDEN

In regular sized packets, 5c each. Postpaid.

If ordered by express, deduct 10 cents per pound.

Early Very Short Scarlet, or Golden Ball—Earliest; small round. Per oz., 25c; $\frac{1}{4}$ lb., 75c; per lb., \$2.50. Ptpd.

Short Horn, or Early Scarlet Horn—Popular standard early. Per oz., 25c; $\frac{1}{4}$ lb., 75c; per lb., \$2.50. Postpd.

Chantenay, or Model—One of the finest in quality for table. Per oz., 10c; $\frac{1}{4}$ lb., 25c; per lb., 75c. Postpd.

Burpee's Oxheart, or Guérande—Of splendid quality. Per oz., 10c; $\frac{1}{4}$ lb., 25c; per lb., \$1.00. Postpaid.

True Danvers Half-Long—A great favorite; dark orange. Per oz., 10c; $\frac{1}{4}$ lb., 25c; per lb., 75c. Postpaid.

Improved Long Orange—A very fine strain; good keeper. Per oz., 10c; $\frac{1}{4}$ lb., 40c; per lb., \$1.00. Postpaid.

In regular size, each of the above 5c per packet.

CARROTS FOR STOCK FEEDING

These are esteemed highly as a wholesome and nutritious addition to the winter feeding of stock when dependent on grain and dry forage. They are easily raised and keep in excellent condition when properly stored.

The most popular Improved Short White is thick at the shoulder and tapers rather quickly, being from six to eight inches in length.

The Large White and Yellow Belgian are long and slender; as fully one-third to one-half of the root grows above the surface, they are, however, easily pulled. They differ

only in color of the flesh, as indicated by their respective names.

Improved Short White—The best and most productive. Per oz., 10c; $\frac{1}{4}$ lb., 25c; per lb., 75c. Postpaid.

Large White Belgian—Large white; very productive. Per oz., 10c; $\frac{1}{4}$ lb., 25c; per lb., 75c. Postpaid.

Large Yellow Belgian—A good keeper for late feeding. Per oz., 10c; $\frac{1}{4}$ lb., 25c; per lb., 75c. Postpaid.

In regular size packets, each of the above, 5 cents per packet. If ordered by express, deduct 10 cents per pound.

WRITE FOR SPECIAL QUOTATIONS ON LARGE QUANTITIES

CAULIFLOWER

The Cauliflower, although one of the most delicious vegetables, is but little grown, except by professional gardeners, because of the erroneous notion that it is so difficult to grow that only skilled gardeners can produce it. Any one will be reasonably certain of success with this most desirable vegetable if he carefully follows the cultural directions given below.

Culture.—For spring and early summer crop, sow in March or early April, in hotbed and transplant to cold frame when sufficiently large to handle. As soon as danger of hard freezing is over set in the open ground in rows two and one-half feet apart and eighteen inches apart in the row. The plants will endure a light frost. The soil for cauliflower should be like that for cabbage, but it is better if made richer than is ordinarily used for that crop. Plenty of good manure must be well incorporated with the soil, and the latter be brought into the highest state of tilth. No application, however, can be more necessary or more useful than that of cultivator and hoe. For late crop, sow at same time as for late cabbage and treat in the same manner. It should be borne in mind that cauliflower will not head up well in hot, dry weather, and hence the sowings need to be so timed as to bring the heads to maturity either before the hot summer weather sets in, or not until the cooler weather of the fall. If it receives at this time a liberal supply of water, the size and quality of the heads will be greatly improved. After the head begins to form, draw the leaves over and tie them together to protect it from the sun and to keep it white. The heads should be cut for use while the "curd" is compact and hard, as they soon become impaired in quality and appearance after they open and separate into branches. Of the enemies of the crop, none is more formidable than the cabbage-root maggot. This seems to have a special liking for the cauliflower. Probably the best and most surely effective protective measure is enveloping each plant with a tight-fitting collar of tarred felt. Plant lice are another serious pest of this crop. Effective remedies are dusting with fine tobacco dust, or spraying with strong tobacco tea or kerosene emulsion.

All the cauliflower seed we offer is produced by the most experienced growers in Europe, in such localities as are best suited to its proper development, and the greatest care is taken to save seed from perfectly developed plants only.

BURPEE'S BEST-EARLY

The Earliest and Best Quick-Growing Cauliflower.—This grand strain was first introduced thirty years ago, and has fully maintained all the merits then claimed for it. The plants are of strong growth, with erect, pointed dark green leaves growing closely about the head.

It is remarkable both for the extreme earliness and certainty with which the plants produce fine heads. In good soil the heads measure eight to ten inches across; they are of pure snowy white, with very close compact curd of extra fine quality. So extremely solid and deep are the nearly globe-shaped heads that they weigh heavier than other heads of equal size. Market gardeners can plant Burpee's Best-Early Cauliflower for both early and late crops, with full assurance that it is the choicest and most reliable strain that can be procured. Had we space to spare, we could publish many testimonials from experienced growers who are most enthusiastic in stating that this is, beyond doubt, all its name implies—"The Best-Early Cauliflower." Pkt., 10c; per oz., \$3.00; ¼ lb., \$10.00.



DRY WEATHER OR DANISH GIANT

Burpee's New "Dry Weather" Cauliflower—Succeeds even where all others fail. Similar to Burpee's Best-Early, it produces equally large, solid, pure white heads, and is only about a week later. It is especially adapted for growing in dry locations where other varieties fail; make the soil quite rich and give thorough cultivation. It is superior to any other excepting only Burpee's Best-Early. By the use of this strain fine cauliflower can be grown in many dry districts where it has been impossible heretofore to raise this luscious vegetable. Pkt., 10c; ¼ oz., 75c; Per oz., \$2.00; ¼ lb., \$6.00.

STANDARD VARIETIES OF CAULIFLOWER

Early Snowball—This is a popular extra early strain of dwarf compact growth. Under favorable circumstances, nearly every plant will make a fine solid head of good size. It is valuable for both early and late. Pkt., 5c; per oz., \$2.00; ¼ lb., \$5.00.

Extra Early Dwarf Erfurt—(Extra Selected.) This is the choicest selected strain of the popular Erfurt type, and is remarkable for its extreme reliability in heading. Plants very dwarf. Per pkt., 5c; oz., \$2.00; ¼ lb., \$5.00.

Early Dwarf Erfurt—While less expensive this will give quite good results in suitable localities. Pkt., 5c; oz., 75c; ¼ lb., \$3.00.

Extra Early Paris—This is the dwarfest and earliest heading of all. Heads are solid, but are not so large nor sure-heading as the Erfurt type. Per pkt., 5c; oz., 50c; ¼ lb., \$2.00.

Algiers—A very strong growing late variety, with large leaves of a bluish cast. In cool locations and rich soil it produces very large solid heads late in the fall. Per pkt., 5c; oz., 50c; ¼ lb., \$1.75.

Veitch's Autumn Giant—A large late cauliflower, producing quite compact white heads. These large late sorts are not nearly so reliable as the earlier Erfurt type. Per pkt., 5c; oz., 50c; ¼ lb., \$1.50.

CELERY



Sow the seed (which is slow to germinate) in shallow boxes indoors or in a finely prepared seed bed out of doors in straight rows, so that the small plants may be kept free from weeds. See to it that the seed is not covered too deep and that the bed is kept moist, almost wet, until the seed germinate, as plenty of moisture is essential to get a satisfactory growth. The seed will not germinate well if planted in a hotbed or where subjected to a temperature above 60 deg. Fr. When the plants are one to two inches high, thin out and transplant so that they may stand three inches apart each way. When they are four inches high, cut off the tops, which will cause the plants to grow stocky.

The crop is usually made to succeed some earlier one, but in order to grow good celery the soil must be made as rich as possible, the essentials to success being very rich soil and plenty of water. If good plants are used, they may be set out as late as the middle of August; but the best results are usually obtained from setting about the middle of June or first of July. The most desirable time will depend upon local climate, and it is that which will bring the plants to maturity during cool, moist weather. In setting, prepare broad trenches about six inches deep and four to six feet apart in which the plants should be set six inches apart cutting off the outer leaves and pressing the soil firmly about the roots. When the plants are nearly full grown, they should be "handled," which is done by gathering the leaves together while the earth is drawn about the plant to one-third its height, taking care that none of it falls between the leaves, as it would be likely to cause them to rust or rot. After a few days draw more earth about them, and repeat the process every few days until only the tops of the leaves are visible. Or it may be blanched by pressing the leaves together with two wide boards held in place by stakes or by wire hooks at the top. This is the method commonly used by market gardeners, but celery so blanched is more likely to become pithy than that blanched with earth. Care should be taken that the plants are not disturbed while they are wet or the ground is damp; to do so increases the liability to injury from rust.

A part of the crop may be simply "handled" and then at the approach of severe freezing weather taken up and set out compactly in a dark cellar or an unused cold frame, and it will then gradually blanch, so that it may be used

where the temperature can be kept just above the freezing point and it will then gradually blanch, so that it may be used throughout the Winter. Should the plants begin to wilt, water the roots without wetting the stalks or leaves and they will revive again.

Celery is sometimes grown by what is termed the new process, which consists in making a spot as rich as possible and there setting the plants six to eight inches apart each way. If the soil is very rich and there is an abundance of water, the plants will blanch each other and the product will be very white and handsome, but we think it is inferior in quality to that grown by the old method.

SELF-BLANCHING EARLY VARIETIES

Golden Self-Blanching—The best of all early "self-blanching" varieties. First introduced in America is 1884, this is decidedly better in quality than the White Plume. It is ready for use nearly as early, blanches as easily, and is larger in size. It is of dwarf compact habit, with thick, solid, heavily ribbed stalks, which blanch easily to a clear waxen yellow. When grown in rich moist soil, the stalks are numerous, each plant being fully as thick through as the largest of the tall late sorts, and with a large solid heart of beautiful golden-yellow stalks and leaves. Per pkt., 5c; oz., 85c; ¼ lb., \$3.00. Postpaid.

White Plume—This is the earliest and most easily blanched, but does not keep well taken from the trenches. The plants grow rapidly and blanch easily during the summer months. Later in the fall the central stalks and leaves are of pure snowy whiteness, even without earthing up, but stalks should be gathered together and earthed up as in other varieties, so as to produce close attractive bunches. Per pkt., 5c; oz., 25c; ¼ lb., 60c; per lb., \$2.50, postpaid.

CELERICAC OR TURNIP ROOTED CELERY

Culture—Sow the seed at the same season and give the same treatment as common celery. Transplant the young plants to moist rich soil, in rows two feet apart and six inches apart in the row. Give thorough culture. As the roots are the edible portion of this vegetable, it is not necessary to earth up or "handle" it. After the roots have attained a diameter of two inches or over, they are fit for use. To keep through winter pack in damp earth or sand and put in the cellar or leave out of doors, covering with earth and straw like beets or carrots.

Large Smooth Prague—An improved form of turnip-rooted celery producing large and smooth roots, which are almost round and with very few side roots. Plants vigorous, with large, deep green foliage. Pkt., 5c; oz., 20c; 2 oz., 35c; ¼ lb., 60c; 1 lb., \$2.00. Postpaid.



CORN—Sweet or Table Varieties

Culture—A rich, warm, alluvial soil is best, but excellent sweet corn can be raised on any good, ordinary soil, if it is deeply and thoroughly worked before planting. In the North sweet corn should be planted as early as can be done without taking great loss from frost or from rotting of the seed in the soil. Give frequent and thorough but shallow cultivation until the tassels appear.

BURPEE'S "GOLDEN BANTAM"

Earliest and Best of All Extreme-Earlies;—Most Surprisingly Delicious in Flavor.

Burpee's Golden Bantam—Is becoming each year more firmly fixed in popular favor, because of its extremely early character, vigorous growth and surpassing delicious flavor.

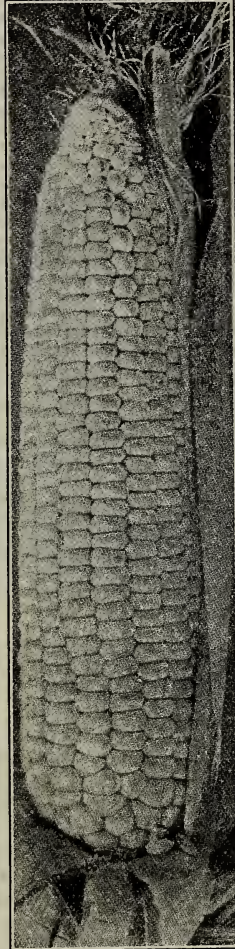
Although the dry grain is entirely free from any flinty glaze, it is exceptionally hard and firm, hence can be planted earlier than any other true sweet corn. The stalks are dwarf and sturdy in habit, growing to a height of four feet; they bear two and three good ears, which are set well above the ground. The ears, five to seven inches in length, have eight rows of broad yellow grains, extending to the extreme rounded tip.

Golden Bantam.—Is not only *extra early* but also *extra hardy*. Although the grain in the young tender state is sweet and rich beyond comparison, the dry seed is quite solid, permitting of the earliest planting. Plantings can be made a week or ten days earlier than with the shriveled seed of regular types. Even if planted at the same time, Golden Bantam is as early as the *Cory* and vastly finer in flavor.

Golden Bantam.—Is dwarf in growth, the stalks averaging four feet in height. The ears are from five to seven inches in length; but what they lack in size is more than made up in *productiveness and quality*. The small stalks can be grown closely together in the row and in good soil will produce two and three fine ears to a stalk.

Golden Bantam.—When ready for use has grains of a rich creamy yellow, which deepens to orange-yellow as it ripens. This distinct color is so unusual that many persons seeing it for the first time ask: "*Is that really a sweet corn?*" A single trial of its splendid quality soon convinces them that Golden Bantam is *actually the finest flavored of all sweet corn!*

Golden Bantam.—Has gained such a wide National reputation that many Summer hotels feature it *by name* on their bills of fare. When we have had to report "*Sold out,*" customers have begged for a quart or a pint of seed which they "*must have at any price!*" Price, per pkt., 10c; lb., 25c, postpaid.



Golden Bantam.—Is the hardest sweet corn for the cool Northern States. It is also the best variety to plant late in the summer for late fall use. It is the richest in flavor of all.

Golden Bantam.—While especially recommended for the Northern States, is desirable also for warmer locations, both as a *first-early* and for *late plantings*. It is valuable because the ears, protected by a good firm husk, are not liable to smut as is so often the case with sweet corn in the South.

Golden Bantam.—Is becoming so increasingly popular each year that it has been almost impossible for us to grow sufficient to meet the demand. We regretted extremely last year to have to disappoint hundreds of customers who ordered late in the season.

Many market gardeners report that they find Golden Bantam their most profitable variety throughout the season [from successive plantings] as soon as customers become acquainted with its splendid flavor and distinct color. It is as distinct in flavor from that of white varieties as in color—being almost literally "*sweet as honey.*" The skin is so exceptionally tender that it does not need scoring or cutting across the grain.

No garden is complete without Golden Bantam Corn.

Order early as last season we had to disappoint a great many. Price, per pkt., 10c; lb., 25c, postpaid.

NEW SWEET CORN

CREATED BY AN OREGON FIRM OF SEED GROWERS

One hesitates about introducing a new Sweet Corn, since some one in the Seed Trade seems to have something new in this line every year. Some are of sterling merit and become standard varieties and some are soon forgotten. This is what they say about Portland Market.

Portland Market.—We are having a great run on this, the largest first early corn we believe there is in existence. Long before the corn planting season was over last spring we were sold out of this seed. This corn is the result of several years of careful selection and breeding up from an 8 and 10-rowed corn, called the Oakview Market. The ears now run 12 to 16 rows and are often one foot in length. They are as large as many of the second early sorts, while those who grew corn from this seed last spring, in our

vicinity, were the first to market true sweet corn. The stalks are very short and small to carry such large ears; in fact, some of our visitors remarked "that they were all ears." It matures very even, the husks are thin, making the mature ears easy to detect. On trial with a dozen "Earliest of All" corn this came out in the lead with marketable ears. You will make no mistake to plant this corn for early garden or market. Seed of selected ears. Pkg., 10c; per lb., 35c, postpaid.

CORN—SWEET OR TABLE VARIETIES

To have the finest sweet corn, it must be picked in just the right condition, that is, when the skin of the grain breaks at the slightest puncture, and plantings should be made frequently enough always to have a supply at this stage. The quality will be inferior if it is either a few days too old or too young.



STOWELL'S EVERGREEN.

Howling Mob—Is ready for use only three to five days later than the extra early Cory, when both are planted at the same time, but the ears are so much larger in size, while the grains are so much whiter and sweeter, that it should really be compared with the second-early Crosby's Twelve-Rowed and other varieties of a later season.

For the earliest supply of fine, large, handsome ears, having the true sweet or sugary flavor, we feel that we cannot recommend the Howling Mob too strongly, either for home use or to the market gardener having a trade for quality in garden products. Per pkt., 10c; lb., 35c, postpaid.

White-Cob Cory—This is equally as early as the Red-Cob Cory, but is rather less hardy. The grains retain their pearly whiteness when cooked. Per pkt., 10c; lb., 25c, postpaid.

Early Minnesota—The standard early variety, of strong growth. Ears larger than the Cory and matures between that variety and the Crosby. Eight rows of quite large sweet grains. Per pkt., 10c; lb., 25c, postpaid.

Kendal's Early Giant—A second-early variety, several days earlier than Crosby. Ears average seven inches in length, thick through, with ten or more rows of large grains of rich sugary flavor. Per pkt., 10c; lb., 25c, postpaid.

Stowell's Evergreen—This has long been the leading main-crop variety for home use, market and canning. Our stock is carefully selected, and can be depended upon to produce fine large ears of superior quality. The grains of good size, are long and slender—entirely free from glaze or flintiness. Per pkt., 10c; lb., 25c, postpaid.

White Evergreen—Makes strong, vigorous stalks, seven feet in height. The ears have white tassels and light-colored silk. The ears contain sixteen or more rows of deep grains, which are protected by a thick, heavy husk. Two, even three, fine ears are frequently produced on each stalk. Per pkt. 10c; lb., 35c, postpaid.

Early Fordhook—This is the largest-eared extra early dwarf-growing true sweet corn, the ears averaging six to seven inches in length. It is two to three days earlier than the Cory, and has both grains and cob of pure white coloring. The ears are eight-rowed, with quite small cob and deep grains. While similar in growth, it is greatly superior to the Cory in flavor. Per pkt., 10c; lb., 25c, postpaid.

Black Mexican—A medium-early variety, growing about six feet in height, ears eight inches long, well filled with eight rows of large rather flat grains, which are a deep bluish purple of superlatively sweet flavor. Pkt., 10c; lb., 25c, postpaid.

Country Gentleman.—Has a small white cob densely covered with irregular rows of deep, splendid white grains of delicious flavor. Ears average 8 to 9 inches in length. The stalks grow about 6 feet high and average three or four ears each. Pkt., 10c; lb., 25c, postpaid.

Peep o'Day.—The points of this remarkable new Corn are its extraordinary earliness and sweetness. The early varieties of Sweet Corn do not yield as heavily as the later sorts, but owing to the fact that the stalks of this variety bear from two to three ears each and are very dwarf, they can be planted close together. Pkt., 10c; lb., 25c, postpaid.

THE BEST VARIETIES OF POP CORN

Queen's Golden—The stalks grow six feet high, and the large ears are produced in abundance. It pops perfectly white, and a single kernel will expand to a diameter of nearly one inch. Per pkt., 10c; per lb., 30c, postpaid.

White Rice—The most widely known variety; very popular for parching. Selected seed. Per pkt., 10c; per lb., 20c, postpaid.

Silver Lace—It suckers so that a single kernel will produce three to four stalks. The ears are five to six inches in length, well filled out to the end with smooth, round, metallic, white grains. Shelled: Per pkt., 10c; per lb., 25c, postpaid.

California Yellow—The stalks do not throw out suckers, but are stout, four feet in height, thickly set with leaves, and each produces three or more ears. The ears are from two to three inches in length, with rice-like grains of a light golden yellow. Besides being extremely prolific, the grains pop well and are of excellent quality. Per pkt., 10c.

Golden Tom Thumb—The stalks grow only eighteen inches high, and each stalk produces two or three perfect little ears, only two to two and a quarter inches long, completely filled with bright golden-yellow grains, which when popped expand to a large size. It is a perfect miniature corn, and so ornamental that it can be grown in a flower garden. Per small pkt., 10c.

PARCEL POST RATES--SEE INSIDE COVER PAGE

FIELD CORN

THESE VARIETIES HAVE ALL BEEN GROWN ESPECIALLY FOR SEED. THE SEED IS WELL CURED AND TRUE TO NAME.

THERE is no longer any doubt as to Corn being grown successfully in the Northwest, and careful tests have proven the following to be adaptable to our coast climate. As a fodder crop corn cannot be excelled and cut green and packed in silos it makes a valuable green feed for milch cows.

Hickory King Corn.—This has the largest grain with the smallest cob of any white corn. So large are the grains and so small the cob that on an ear broken in half a single grain will almost completely cover the cob section. Of strong growth, the stalks take a firm hold in the ground and stand upright. It yields splendid crops on light soil, and is undoubtedly the most productive white field corn for the South. Per pkt., 10c; per lb., 25c; 3 lbs., 65c postpaid.

Sugar Corn for Green Fodder.—We offer seed of Sugar Corn which is especially grown for fodder purposes, being of quick growth and early maturity. Sown at the rate of two bushels per acre in drills four feet apart, it makes a splendid stalk six to eight feet in height, which are of the finest quality for feeding green, cutting for ensilage, or curing for fodder. Per pkt., 10c; lb., 25c, postpaid.

Reid's Yellow Dent.—This is now the standard variety in many of the corn-growing sections of the Middle West. Ears average nine to ten inches long, tapering slightly toward tip, are about six inches in circumference contain 16 to 20 rows, and are remarkably uniform. Kernels light yellow, deeply dented, and well placed on a white cob of medium size. Usually matures in 110 to 115 days. We have been very well pleased with our crops of this variety, having found it sure to mature when planted early in May, and a very heavy yielder with a very small percentage of nubbins. The strain we offer has been carefully selected. Per pkt., 10c; per lb., 30c; or 3 lbs. for 75c, postpaid.

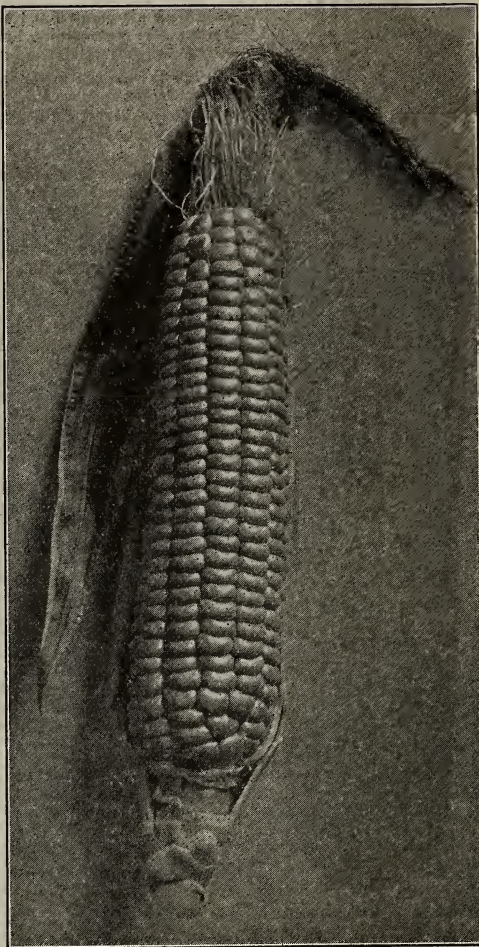
Canada Yellow Flint.—The Flint corns are the hardest in maturity and can be grown satisfactorily much farther North than the Dent corns. Our strain is of an improved type, producing long, well-filled ears, with eight rows of quite large grains. Prices quoted below.

White Cap Dent.—This combines the earliness and hardness of the Pride of the North, with ears of very large size. The stalks are stout, growing six to seven feet in height, with abundant foliage. Ears of handsome appearance, eight to ten inches in length, well filled, having sixteen to eighteen rows of deep grains. The cob is small, grains being very deep, and quite wide. The outer end of the grain is white, deeply dented, while the inner portion is a clear amber-yellow. The grains are flattened and set squarely on the cob, and completely fill the entire surface of the ear. Choicest stock at prices quoted below.

King of the Earlies.—This is a very early maturing variety of yellow Dent corn. The stalks are slender, growing about six feet in height, producing one or two ears to a stalk. The ears are of medium size, with small dark red cob, well filled with quite slender, but deep grains, shelling well; with us this variety produces fully ripened ears in ninety days. It is excellent for cool short seasons of the extreme North, and produces corn of finer quality than the Flint type, as well as being more productive. Prices as quoted below.

Pride of the North.—This variety is quite similar to the preceding, and is excellent for short cool seasons, or where a late planting is made farther South. The ears are from eight to ten inches in length, and have from fourteen to sixteen rows of slender, deep yellow grains. Prices as quoted below.

Burpee's Golden Beauty.—It is the largest-grained and handsomest yellow corn we had ever seen. The ears have brightest golden-yellow grains, of remarkable size and completely filled out to the extreme end of the cob.



The cobs are unusually small; when broken in half, the grains will generally reach across. The richness of color and fine quality of grain make it superior for grinding into meal. The stalks grow vigorously to a height of eight to ten feet. Prices as quoted below.

Improved Leaming.—A very popular and extremely productive variety. On good land the stalks grow tall, producing two good ears to each stalk. The ears are long, with small red cob, well filled with grains of medium size, of a rich golden color. It ripens in from 100 to 110 days, and makes a good crop even in dry seasons, by reason of its strong vigorous growth. Stalks are leafy, making excellent fodder, while the grains, being so deep, yield an extra large quantity of shelled corn per bushel of ears. See prices quoted below.

Prices of all varieties of Field Corn on this page, excepting Reid's Yellow Dent: Per pkt., 10c; per lb., 25c; 3 lbs., 65c, by mail, postpaid.

Write for special prices when larger quantities are wanted than priced

CUCUMBER

This is one of the vegetables that can be grown to perfection by anyone who can control a few square yards of soil that is fully exposed to the sun. The fruit is so much better when gathered fresh from the vines than it is in the more or less wilted condition in which it is found on the market that every family should be supplied from its own garden.

Culture.—In order to obtain the largest yield of cucumbers the soil should be well enriched with well-rotted manure, but an abundance of good fruit can be raised on any rich garden soil. Plant the seed not over an inch deep in hills four to six feet apart each way, dropping fifteen to twenty seeds in a hill. After the plants begin to crowd and danger from the striped beetle is pretty nearly over, thin to three plants to the hill. Give frequent but shallow cultivation until the plants make runners so long that this is impracticable. In field culture, plow furrows four feet apart and similar ones at right angles to the first. At each intersection drop a shovelful or more of well-rotted manure, which should be well mixed with the soil, forming a broad, flat hill four to six inches above the surface. Many growers omit every fourth row, thus forming paths for distribution of manure and gathering the fruit. In many sections, where earliness is very important, market gardeners start plants in boxes made like the ordinary berry box, but without the raised bottom. The boxes are set in hotbeds or cold frames, filled with rich, friable soil, and the seed planted. When danger of frost is over, the plants are set in the open ground, the boxes being cut away, so the roots are not disturbed at all.

Pick the fruit before it begins to ripen, as the vines will cease setting fruit as soon as any seed begins to mature. In gathering for pickles, cut the stem, instead of pulling the fruit off, and be careful not to mar the fruit in any way, for if the skin is broken, the pickles will not keep so well.

We pay particular attention to growing and selecting the various strains of cucumbers, so as to keep them pure and true to name.

London Long Green—This is an old-time popular garden favorite. Under favorable conditions produces dark-green fruits from ten to twelve inches in length. Skin a deep rich green; flesh solid, crisp and of excellent quality. Per pkt., 5c; oz., 10c; ¼ lb., 25c; per lb., 85c; postpaid.

Burpee's Fordhook White Spine—The fruits are nearly cylindrical in form, slightly pointed at the ends, perfectly smooth, of deep rich coloring, marked with distinct white lines at the blossom end. They are of extremely handsome and attractive appearance. Vines are vigorous in growth and enormously productive. Fruits retain their dark-green coloring and crisp freshness longer after picking than any other variety—excepting only the new "Fordhook Famous." They retain also their fine quality even after the seeds are well formed. Splendid as table cucumbers and for market, while it is equally as desirable for commercial pickles. Per pkt., 10c; oz., 15c; ¼ lb., 40c; per lb., \$1.25, postpaid.

Burpee's Extra Early White Spine—This is a special strain of the popular White Spine Cucumber, which is most desirable for its extreme earliness. It is earlier than the Fordhook or special forcing strains. The fruits are slightly smaller in size, but of smooth, regular form, well colored, and excellent flavor. It is a valuable variety to plant for early market. Per pkt., 5c; oz., 15c; ¼ lb., 40c; per lb., \$1.25.

Burpee's Fordhook Pickling—Excepting only the New Cumberland this is the best and most prolific variety for producing pickles of medium size, both for home use and market, or to grow for the pickle factories—in fact, we prefer it to the Cumberland. The vines are extremely vigorous and healthy, yielding a large number of fruits if kept gathered at the proper stage, and remaining in strong, healthy growing condition longer than any other variety. Skin extremely thin, tender and free from toughness when pickled. If allowed to grow to full size, fruits are of excellent table quality, but where the largest quantity of pickles is desired fruits should be gathered while small, so as to insure the greatest crop; to produce larger fruits for slicing will soon check growth and productiveness of the vines. Per pkt., 5c; oz., 10c; ¼ lb., 30c; per lb., \$1.00, postpaid.



Extra Early Green Prolific, or Boston Pickling

—This is a very prolific variety, largely planted for pickles. The fruits average four to five inches in length when large enough for slicing, and are of excellent quality; but it is chiefly for producing medium-sized pickles that this variety is so highly esteemed. If the fruits are gathered as soon as large enough, the vines will continue bearing through a long season. Per pkt., 5c; oz., 10c; ¼ lb., 25c; per lb., 80c.

Arlington White Spine—The cucumbers are very regular in outline, uniform in size, averaging seven to eight inches in length, straight and of a rich, dark-green color. Flesh white, crisp, and solid, with comparatively few seeds. Vines are of vigorous growth and very productive. Per pkt., 5c; oz., 10c; ¼ lb., 30c; per lb., \$1.00, postpaid.

Burpee's Fordhook Famous—The longest White Spine, the finest flavored of all. This is the handsomest and best of all long green cucumbers; always straight and well formed, they never turn yellow, and critical buyers are willing to pay an extra price on market for these unequaled fruits. Per pkt., 10c; oz., 15c; ¼ lb., 40c; per lb., \$1.40, postpaid.

Japanese Climbing—The strong vines throwing out numerous tendrils can be trained upon a trellis or poles which will insure earlier ripening and a straight, handsome form in the large fruits. It endures Summer heat and drought exceedingly well. The cucumbers are from twelve to sixteen inches in length. Skin smooth, dark-green, turning to brown and netted when ripe. The flesh is pure white, crisp and of mild flavor. Per pkt. 5c; oz., 15c; ¼ lb., 40c.

West India Gherkin—A very prolific small-fruited variety, used exclusively for pickling. It is not properly a cucumber, and of no value for slicing. The fruits are two to three inches in length, thick, rounded form, closely covered with spines. Vines rather slender, with small foliage, but of strong growth. Per pkt., 5c; oz., 20c; ¼ lb., 60c, postpaid.

Egg Plant

Burpee's "Black Beauty"—Earliest and best of all large-fruited egg plants. It is valuable alike to the private planter and the extensive grower for market. Black Beauty produces fruits fully as large and ready for use ten days to two weeks earlier than the New York Improved Purple. The grand large fruits are thick—of most attractive form, as shown in the illustration. The skin is a rich, lustrous purplish black—the satin gloss and rich coloring adding

greatly to the beauty of these "eggs." The intensely brilliant coloring is uniform over the whole fruit. The calyx is entirely free from spines or thorns. The crop of seed is unfortunately, very short—order early!

The fruits set freely and develop quickly, so that the entire crop can be gathered before there is any danger of frost. We are sure that truckers generally will make their main planting of Burpee's "Black Beauty" as soon as they learn its unusual value. Per pkt., 10c; $\frac{1}{2}$ oz., 40c; per oz., 70c; 2 ozs., \$1.15; $\frac{1}{4}$ lb., \$2.00; per lb., \$7.00.

Endive



This plant furnishes an attractive and appetizing salad for the Fall and Winter months.

Green Curled—Leaves finely cut or lacinated. Per pkt., 5c; oz., 15c; $\frac{1}{4}$ lb., 40c; per lb. \$1.25.

White Curled—Does not need blanching, the midribs being naturally of a pale golden yellow, and the finely cut and curled leaves almost white. Per Pkt., 5c; oz., 15c; $\frac{1}{4}$ lb., 40c; per lb., \$1.50.

Giant Fringed, or "Oyster"—This is the beautifully fringed sort displayed upon blocks of ice on piles of oysters before so many restaurants. Of strong growth, it has a large white heart and broad stems. Per pkt., 5c; oz., 15c; $\frac{1}{4}$ lb., 40c; per lb., \$1.50.

Batavian—Large heads of broad, thick leaves, which can be blanched as a salad or make excellent cooked greens. Per pkt., 5c; oz., 15c; $\frac{1}{4}$ lb., 40c; per lb., \$1.50.

Horseradish

Sets planted in May, small end down, with the top one inch below the surface, in rich, well-cultivated soil, will form radish of large size in one season's growth. Of the common

variety, we offer small roots, 8 for 20c; 25c per dozen, or 90c per 100, postpaid. By express or freight: Per 100, 65c; 500 for \$3.00; per 1000, \$5.50.

Kale or Borecole

Dwarf German or German Greens—(Dwarf Curled Scotch.) Leaves are curly, bright green, very tender, and delicate in flavor. Per pkt., 5c; oz., 10c; $\frac{1}{4}$ lb., 25c; per lb., 75c.

Dwarf Siberian—Of dwarf growth, with large broad grayish-green leaves which are only slightly curled at the edges. Extremely hardy. Per pkt., 5c; oz., 10c; $\frac{1}{4}$ lb., 25c; per lb., 75c.

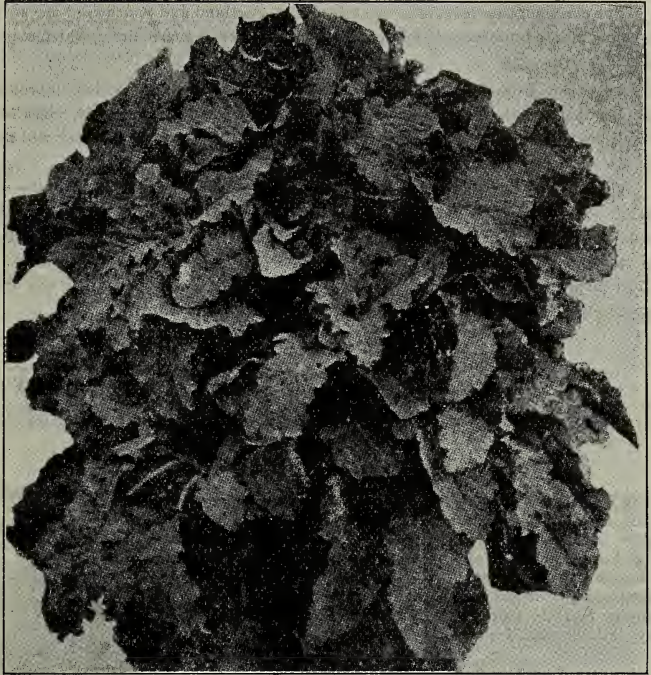
Tall Green Curled Scotch—This makes a beautiful plant about two and a half feet high. Per pkt., 5c; oz., 10c; $\frac{1}{4}$ lb., 25c; per lb., 75c, postpaid.



Thousand-Headed Kale

Is a variety of cabbage that produces enormously. The plant attains a height of 3 to 4 feet; the stem is covered with leaves. Animals, especially sheep, eat it greedily. It grows well on any land and is very hardy. We do not hesitate to predict that in a few years' time it will be as popular and as widely used as Dwarf Essex Rape.

The seed may be either drilled or broadcasted. Drilled is the better. If drilled, plant rows 26 to 30 inches apart as plants should be thinned out so as to stand 16 to 18 inches apart in the rows. In drilling use $\frac{1}{4}$ to 1 lb. of seed to the acre; in broadcasting, $1\frac{1}{2}$ lbs. Pkt. 5c; oz., 10c; 30c per lb., postpaid.



THOUSAND-HEADED KALE.



Kohl-Rabi

Kohl-Rabi is grown for its turnip-shaped bulb, which is formed above the ground. The bulb should be used while young and tender. Set plants eight inches apart.

Early White Vienna—The best for table use. Per pkt., 5c; oz., 25c; $\frac{1}{4}$ lb., 70c; per lb., \$2.25 postpaid.

Early Purple Vienna—Most largely grown for table use in Germany. Per pkt., 5c; oz., 25c; $\frac{1}{4}$ lb., 70c; per lb., \$2.25.

Green or White—Good for table use and stock feeding. Per pkt., 5c; oz., 10c; $\frac{1}{4}$ lb., 30c; per lb., \$1.00, postpaid.

Leeks

Broad London, or Large American Flag—This is a strong-growing variety, producing large, thick stems of sweet flavor when properly blanched. Per pkt., 5c; oz., 10c; $\frac{1}{4}$ lb., 30c; lb., \$1.00.

Monstrous Carentan—Of large size, with broad flat leaves. Per pkt., 5c; oz., 15c; $\frac{1}{4}$ lb., 40c; lb., \$1.25.

Long Mezieres—The plants are of strong, vigorous growth, extreme hardiness, and have extra long stems, which blanch readily to a snowy whiteness and are of delicious flavor. Per pkt., 10c; oz., 15c; $\frac{1}{4}$ lb., 40c; per lb., \$1.50, postpaid.

LETTUCE

For early outdoor culture in the latitude of Portland and Southward the seed may be planted in the Fall, protecting the young plants from severe freezing either with frames or coarse litter, which may be removed as soon as danger of severe freezing is over.

Lettuce in ground out of doors will stand some freezing, but is killed by prolonged frost or frequent freezing and thawing. North of Portland an early crop may be secured by starting under glass from January to March and hardening off well before setting in ground, which should be done as soon as weather will permit.

Culture.—Lettuce, to be at its best, should be grown rapidly, hence, the soil should be made as rich and friable as possible by liberal manuring and thorough preparation. For Winter, sow under glass from November to February and thin out as necessary to prevent crowding. Keep a moderate heat and give all the light and air possible. For general crop, sow outdoors as early in the Spring as the ground can be worked, in drills eighteen inches apart and thin the young plants to four inches apart in the row. As the plants begin to crowd, thin them out and use as required. In this way a much longer succession of cuttings may be had from the same ground.

EARLIEST AND FORCING VARIETIES

ALL LETTUCE 5c PER PKT., POSTPAID

Big Boston

Big Boston—This is a fine forcing variety for cold frames during the winter months, as it produces heads of very large size in a cooler temperature than most forcing strains. Large heads are beautifully blanched and of superior quality. It heads well in the open ground during cool weather of spring and fall, and is very popular in the South to grow for shipping North. Our seed is an extra selected strain. Per pkt., 5c; per oz., 15c; $\frac{1}{4}$ lb., 50c; per lb., \$1.25.

Grand Rapids

Grand Rapids—This does not form heads, but makes large compact bunches of light leaves with fringed edges. Its delicious quality and handsome appearance make it most popular in winter markets. It is useful also for outdoor planting during spring and fall. Our stock is extra fine. Per pkt., 5c; oz., 15c; $\frac{1}{4}$ lb., 40c; per lb., \$1.25, postpaid.

White-Seeded Tennis Ball, or **Boston Market**, per oz., 15c; $\frac{1}{4}$ lb., 40c; per lb., \$1.50.

Black-Seeded Tennis Ball—Splendid for forcing. Per oz., 15c; $\frac{1}{4}$ lb., 40c; per lb., \$1.50.



BURPEE'S—EARLIEST "WAYAHEAD"

Earliest "Wayahead" shows a remarkable combination of earliness, firm heading character, handsome appearance and fine quality. Both in cold-frames early in the spring and in the open ground—in spring, summer and early fall months—it has proved to be not only the very earliest and surest heading of all early lettuces we have ever grown, but also of the very finest quality at all seasons. Thousands of satisfied planters are most enthusiastic in praise of Burpee's Earliest "Wayahead" Lettuce!

Burpee's "Wayahead" is not only earlier than May King and other choice extra early varieties, but the heads are also larger in size and more tightly folded. The outer leaves are a light green, while all the inner leaves of the head are nicely blanched to a rich buttery-yellow tint. Burpee's Earliest "Wayahead" stands a longer time before running to seed than any other head variety. Supply very short. Per pkt., 10c; $\frac{1}{2}$ oz., 25c; per oz., 45c; $\frac{1}{4}$ lb., \$1.25; per lb., \$4.50, postpaid.

Early May King

The plants are of quick growth, practically all head and extremely handsome. From early spring plantings in the open ground they grow quickly to a diameter of six to seven inches with the broad, light-green, outer leaves folding closely about the round solid head; in cool weather the edges of these outer leaves are lightly tinged with brown. The inner leaves (practically the entire head) are blanched to a rich golden yellow and have a specially fine, rich, buttery flavor. The round solid heads are so firmly folded that they can be shipped to distant markets and arrive in good condition. We recommend repeated plantings of this fine early variety in the spring, and again during August and September for fall use. Per pkt., 5c; oz., 20c; $\frac{1}{4}$ lb., 60c; per lb., \$2.00, postpaid.

LETTUCE—Continued

“LOOSEHEAD” LETTUCE or CUTTING VARIETIES

Simpson's Early Curled

An early, erect growing, clustering variety. Leaves light green, slightly frilled and much blistered, sweet, tender and well flavored. The sort is especially adapted for sowing thickly and cutting when the plants are very young. Pkt., 5c; oz., 15c; 2 oz., 25c; ¼ lb., 40c; lb., \$1.25.

Black Seeded Simpson

One of the best varieties for early sowing out of doors where a large, thin, exceedingly tender leaf is desired and for those markets which demand a large, loose clustering sort, light yellowish green. Leaves large, thin, slightly ruffled and blistered, even the large outer ones being quite tender. Uniformly attractive, of excellent quality and continues a long time in condition for use. Pkt., 5c; oz., 15c; 2 oz., 25c; ¼ lb., 40c; lb., \$1.50.

Cabbage Lettuce—Butterhead Varieties

All Lettuce 5c per pkt., postpaid.

These all make good, large, solid, well-blanced heads in the open ground, under suitable conditions of soil and weather. Among the most satisfactory are the Deacon and California Cream-Butter, which is grown so largely in the South to ship during Winter to the Northern markets. Salamander and Mammoth Black-Seeded Butter are both good heading varieties for Summer use, and also produce excellent heads when planted in cold frame.

Fine head lettuce can be grown by sowing the seed thinly in drills twelve to eighteen inches apart in rich soil, thinning the plants to stand eight to ten inches apart in the row; or the seed may be sown very thinly in the seed-bed and the young plants transplanted to rows where they are to head. One ounce will sow 300 feet of drill, or three pounds one acre of land in drills eighteen inches apart.

Deacon, San Francisco Market, Large Russian, or Vauxhall.—This magnificent lettuce stands hot weather better than any other of the rich butter varieties, and is justly most popular. Plants make firm heads, nearly as large and almost as solid as cabbage. The heads are light green outside, while the inner blanched portion is beautiful cream-yellow, of delicious, rich buttery flavor. Per pkt., 5c; oz., 15c; ¼ lb., 40c; per lb., \$1.50, postpaid.

Early Prize Head

This old standard variety is still the best of the large, thin-leaved clustering sorts for the home garden, but is too tender to stand shipping or handling on the market. The leaves are very large, crimped, bright green tinged with brownish-red and are exceedingly tender and sweet. Pkt., 5c; oz., 15c; 2 oz., 25c; ¼ lb., 40c; lb., \$1.35.

Burpee's Tomhannock

This has finely curled leaves, lightly tinged with brown, grows to a large size, and will stand for a considerable time before running to seed. Pkt., 5c; oz., 15c; ¼ lb., 40c; lb., \$1.50.

California Cream-Butter,
or Royal

A splendid lettuce for the open ground, producing very large, solid heads in cool weather. Largely planted in the Southern States for shipping to the Northern markets during the winter. Heads of large size, very solid and the interior portion blanched to a beautiful white.

Pkt., 5c; oz., 15c; ¼ lb., 40c; lb., \$1.50, postpaid.

Burpee's Butterhead.—A grand mammoth hard-heading Cabbage Lettuce. Plants twelve inches across, with extra large, solid round heads, that are particularly rich and buttery in flavor, always well blanched and tender. The inner leaves are beautifully white and curled like a fine Savoy Cabbage. Splendid for summer use, both for the home table and for market. Most highly recommended. Per pkt., 5c; oz., 25c; ¼ lb., 75c; per lb., \$2.50, postpaid.

CRISP HEAD LETTUCE



HANSON

New York, or “Wonderful”—Plants of extra large growth, producing heads of immense size, and closely folded: inner portion is beautifully blanched. Outer leaves a deep rich green. Per pkt., 5c; oz., 15c; 2 oz., for 25c; ¼ lb., 40c; per lb., \$1.50, postpaid.

Burpee's Iceberg—The unusual solidity of the heads is insured by the large, white main ribs of the leaves, each of which, curving strongly into the center, acts like a truss, making it impossible for the leaves to open outward and expose the center, which is constantly thoroughly blanched. It matters not whether grown to head in the early spring or the hottest days of summer, the leaves are always crisp and tender. Per pkt., 5c; oz., 15c; ¼ lb., 40c; per lb., \$1.50.

Hanson—See illustration. Grows to large size, and is uniformly sure heading. Heads very solid and beautifully blanched: crisp, mild and tender. One of the finest varieties to grow for market during the summer months. Our stock is unexcelled. Per pkt., 5c; oz., 15c; ¼ lb., 35c; per lb., \$1.25, postpaid.

LETTUCE—Continued

Cos or “Celery” Lettuce—Salad Romaine



Dwarf White Heart Cos Lettuce

gathered together at the top and loosely tied with a piece of soft string or wisp of straw for several days before it is wanted for use.

These Cos Lettuces are exceptionally crisp and mild in flavor, even when grown during the hot summer months, and are specially fine when gathered and served with a plain French dressing. One ounce will plant four hundred feet of row.

This is a very distinct type of lettuce extremely popular in Europe, but not so well known in this country as it should be. The plants are of erect growth, forming a tall, slightly oblong bunch of large crisp leaves. The ends of the leaves generally fold over at the top and blanch the inner leaves to a snowy whiteness and brittle crispness without extra care.

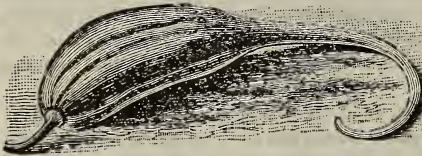
Eclipse, or Express, is a dwarf extra early sort, growing about six inches in height, with the leaves very closely folded together.

Dwarf White Heart Cos is about a week later than the preceding and grows to fully double the size, while the outer leaves are of a lighter tint.

White Cos is a tall later sort, having very long leaves; to blanch this variety the outer leaves should be

	Per oz.	¼ lb.	Per lb.
Eclipse or Express Cos, w. s. Earliest of all.....	\$0.20	\$0.50	\$1.75
Dwarf White Heart Cos, w. s. Crisp and mild. Pkt. 10 cts.....	.30	1.00	
Paris White Cos, w. s. Grows to large size; of fine flavor.....	.15	.40	1.50

Each of the above, except Dwarf White Heart, 5 cents per packet.



MARTYNIA or “Unicorn Plant.”

The Martynia is quite ornamental in growth, forming a spreading bush about two feet in height and of equal diameter. It has large handsome leaves, and bears large clusters of flowers which resemble the Gloxina in color and markings. These are followed by curious twisted hairy seed-pods as shown in the illustration. These pods are gathered while young and tender and pickled in vinegar like small cucumbers. The pods should

not be allowed to grow too large or to remain on the plant until they become hard and woody. The plant requires considerable warmth, and the seed should not be planted until the trees are out in full leaf; when well started the plants should be thinned out to stand at least a foot apart in the row. One ounce will plant about two hundred hills.

Proboscidea. Tender pods for pickling. Per pkt., 10c; oz., 30c; ¼ lb., 85c; lb., \$3.00.

Burpee's “Old-Fashioned” Jenny Lind Melon.

The Very “Sweetest of All” Green-Fleshed Melons!

From Burpee's 1914 Catalogue.

When we began business in 1876 this was the most popular of all Muskmelons in New Jersey, where it was grown extensively for the Philadelphia markets, and deservedly so, as it was the most luscious in flavor. With the introduction of Burpee's Netted Gem and other larger melons, unfortunately, however, even those growers who still stuck to Jenny Lind began selecting for larger size, so that the original strain eventually became lost.

Four years ago we were delighted to find one grower who had a stock of the True Old-fashioned Jenny Lind, of the same delicious quality as it was nearly forty years ago.

The illustration herewith has been accurately engraved from a photograph. The flattened melons are of small size, measuring only three and one-half to four and one-half inches across by two and one-half to three inches from stem to blossom end. The blossom end often shows a knob or button as indicated in the illustration. The seed cavity is small and the beautiful light-green flesh very thick considering the size of the melons.

This true old-fashioned Jenny Lind is the sweetest green-fleshed Muskmelon in existence. The melons are just of the right size for table use to serve as individual

melons; that is, cut in half two halves, or an entire melon, would be about equal one-half of a Rocky Ford or Emerald Gem. We are sure that all who taste this delicious melon will thank us for having “re-discovered” a variety that never should have been allowed to drop out of cultivation. Our seed is all grown in southern New Jersey by Burpee. Per pkt., 10c; oz., 15c; ¼ lb., 40c; lb., \$1.25.

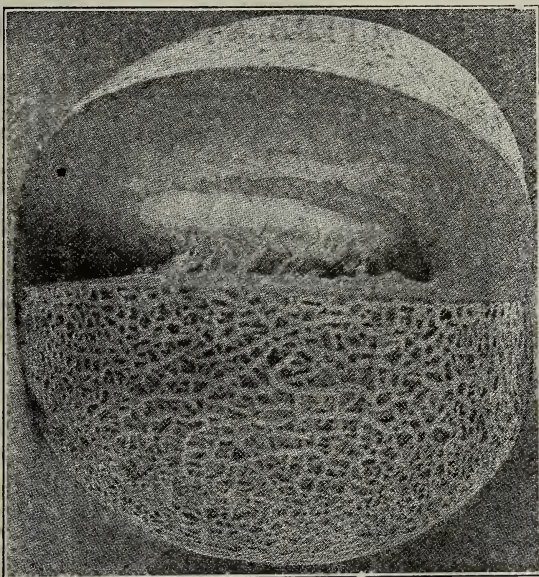


MUSK MELON

Culture—Plant the seed in hills six feet apart each way, dropping ten to twelve seeds in a hill. After the plants begin to crowd and the striped beetles are pretty well gone, thin to four of the most vigorous plants in a hill. Give frequent but shallow cultivation, until the plants make runners so long that this is impracticable. Rich earth for the young plants is far better than manure, but if the latter must be used, see that it is well rotted and thoroughly mixed with the soil.

If the plants grow very rank, more and finer fruit will be secured by allowing the main branch to continue growing, but pinch off the end of each side branch after it has one fruit set. The quality of melons of all varieties is largely dependent upon conditions of growth and ripening. Unhealthy vines or unfavorable weather produces fruit of comparatively poor flavor.

The plants are liable to attack from the striped beetles, which are so numerous in some cases as to destroy them. The beetles may be kept off by frequent dusting with air-slacked lime, soot, or sifted ashes diluted with fine road earth; care should be taken not to use too much of any of the above materials, or the vines will be injured.



Burpee's "Spicy" Cantaloupe

The Spicy is of vigorous growth, wonderfully prolific and strikingly distinct. The handsome melons average about nine inches long by six inches in diameter and are very solid with an unusually small seed cavity. The firm flesh is of the richest salmon, frequently two inches thick and always exceptionally luscious. Its rich sugary flavor has been pronounced quite unique. The juicy flesh is entirely stringless—quickly melting in the mouth; it maintains its sweetness to the very skin. The melons are extra solid and heavy, because the seed cavity is so extremely small.

Burpee's Netted Gem, or "Rockyford"—The most popular and finest green-fleshed Musk melon. The vines are of strong, healthy growth, comparatively short, and branch freely, setting a large number of fruits close to the hill. The melons are even and regular in size and form, nearly round, or slightly oval. They are always finely netted, and the skin is of a light golden hue when fully ripened. The flesh is light green in color, melting and luscious in flavor, and ripens close to the skin, so that there is but a very thin rind in a well-grown fruit. Per pkt., 5c; oz., 10c; ¼ lb., 30c; per lb., \$1.00, postpaid.

Write for special prices in large lots—stating quantity required.

Early Jenny Lind—This is a leading market variety by reason of its extremely early ripening and prolific bearing qualities. The melons are of small size, quite flattened in form, heavily ribbed and netted. Per pkt., 5c; oz., 10c; ¼ lb., 30c; lb., \$1.00, postpaid.

Montreal Nutmeg—This is a very large-fruited variety of superior quality. The large fruits are nearly round in form, slightly flattened at the ends, with very large, broad, heavy ribs. Dark-green skin, thickly covered with heavy netting. The flesh is two inches thick, light green, melting, and of delicious flavor. This is one of the handsomest varieties to grow for exhibition. Per pkt., 10c; oz., 20c; ¼ lb., 60c; lb., \$2.00.

Burpee's Champion Market—A splendid variety of the netted Gem type, producing fruits nearly three times as large. They are regular in form, nearly round, averaging eight inches in diameter, with well netted ribs; thick, light-green flesh, with very thin rind and true Netted Gem flavor. Pkt., 10c; oz., 15c; ¼ lb., 40c; lb., \$1.50, postpaid.

Long Island Beauty—Fruits of large size, well-flattened, heavily ribbed and netted. Of very handsome appearance and fine quality. Most highly recommended; it ripens as

trremely small. The rind is of a cream color, which changes to a grayish yellow as the melon matures; a very slight, rather peculiar netting of delicate white appears irregularly upon the otherwise smooth skin. Per pkt., 15c; oz., 30c; ¼ lb., 85c; lb., \$3.00.

Burpee's "Jersey Button"—In this improved type of Extra Early Jenny Lind there is a distinct nub, or "button," growing out of the blossom end. The flesh is uniformly sweet and melting, but the small nub, or button, has a concentrated sweetness and furnishes a delicious morsel to finish the eating of one of these fine fruits. Our seed has been all saved by the originator, and can be depended upon, not only for the earliest ripening, but also to produce fruits of most uniform size and finest quality. Per pkt., 10c; oz., 15c; ¼ lb., 40c; per lb., \$1.25, postpaid.

Hackensack, or Turk's Cap—Fruits are of good size, round, heavily-ribbed and netted. Hardy and productive with thick, firm, greenish flesh; of excellent flavor. Per pkt., 5c; oz., 15c; ¼ lb., 40c; per lb., \$1.25, postpaid.

Extra Early Hackensack—This is a selection of the popular Hackensack, ripening fully ten days earlier. Melons of good size, heavily-ribbed and netted; thick, light green flesh of fine flavor. Per pkt., 5c; oz., 15c; ¼ lb., 40c; per lb., \$1.50, postpaid.

GREEN FLESHED

early and is similar to Hackensack, but superior. Per pkt., 10c; oz., 15c; ¼ lb., 40c; per lb., \$1.50.

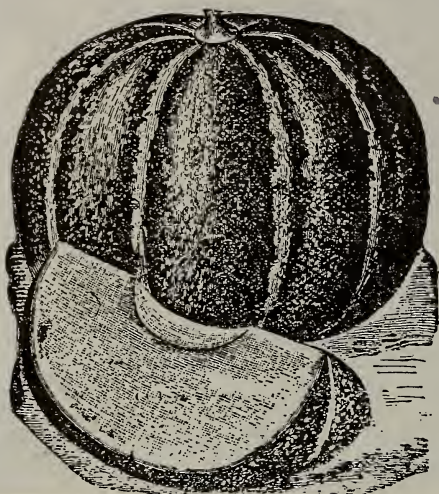
Prolific Nutmeg—Fruits round, seven inches in diameter, slightly flattened at the ends. Well-ribbed and heavily netted. Per pkt., 5c; oz., 15c; ¼ lb., 40c; per lb., \$1.25, postpaid.

Burpee's Bay View—Oblong fruits, twelve to fifteen inches in length. Vines strong, vigorous and productive. Fruits have broad, heavy ribs, well netted, with light-green flesh of good flavor; much better than the old Cassaba. Per pkt., 5c; oz., 15c; ¼ lb., 40c; per lb., \$1.25, postpaid.

Acme, or Baltimore—Fruits of medium size, oval in form, with a slight neck at the stem end. Well ribbed and heavily netted; skin turning to a golden tint when ripened. Flesh firm and of superior quality. Per pkt., 5c; oz., 10c; ¼ lb., 30c; per lb., \$1.00, postpaid.

MUSK MELON

SUPERB SALMON FLESHED MUSK MELONS



EMERALD GEM

Burpee's Popular Emerald Gem Melon—No other melon in cultivation today is of such rich flavor. The melons are about the size of Burpee's Netted Gem, but, unlike that variety, the skin, while ribbed, is generally smooth and of a deep emerald green color. The flesh, which is thicker than in any other melon of the same size, is of a beautiful suffused salmon color, and ripens thoroughly to the extremely thin rind. The flesh is peculiarly crystalline in appearance, and the flavor is sweet and luscious

beyond description. The vines are thrifty in growth, very prolific; the melons mature extremely early, and are always of most superb quality. Per pkt., 10c; oz., 20c; $\frac{1}{4}$ lb., 50c; per lb., \$1.50.

Burpee's Fordhook—The most perfect cantaloupe. It is about the same size as Improved Jenny Lind, very thick flesh, of orange yellow, very small seed cavity comparatively few seeds, flesh very solid and of very high flavor, flesh staying solid and firm after melon has become quite yellow, making it an excellent long-distance shipper. The vines are healthy and a very strong grower, setting fruit close to hill and keep on setting fruit throughout the season to end of vine. They are well ribbed, very heavily netted, weighing about two pounds apiece. Per pkt., 10c; oz., 20c; $\frac{1}{4}$ lb., 50c; per lb., \$1.50, postpaid.

Osage, or Miller's Cream—The fruits are larger than those of the Emerald Gem; nearly round in form, but having the same distinct dark green skin, with lighter bands between the ribs, and thick, firm, orange flesh of fine quality. Per pkt., 5c; oz., 15c; $\frac{1}{4}$ lb., 40c; per lb., \$1.25, postpaid.

Burpee's Melrose—Melons of round or slightly oval form, free from ribs, with dark green skin, changing to a russet when ripe; thickly netted. The fruits are about six inches in diameter, with thin rind, but tough skin, making it an excellent shipper. The flesh is thick, light green in color shading to a rich salmon at the seed cavity; of most luscious flavor. Per pkt., 5c; oz., 15c; $\frac{1}{4}$ lb., 40c; per lb., \$1.25, postpaid.

"Paul Rose," or Petoskey—The fruits are nearly round, or slightly oval, rather larger than Netted Gem, ribbed and heavily netted; of a light green or faint golden hue when fully ripe. The flesh is thick, of rich, deep orange color, and ripens close down to the rind, with small seed cavity. The bright salmon flesh is much firmer than that of our Emerald Gem. It is an excellent shipping variety of handsome appearance and good quality. Per pkt., 5c; oz., 10c; $\frac{1}{4}$ lb., 30c; per lb., \$1.00, by mail, postpaid.

WATER MELONS

Culture—In order to get good Water Melons, it is essential that the plants get a good start, and to this end it is important to prepare hills about eight feet apart by thoroughly working into the soil an abundance of well-rotted manure—hen manure, guano, or other forms rich in nitrogen, being most desirable. Over this highly-manured soil put an inch or more of fresh earth and plant the seed on this, covering it about an inch in depth. It is important that the seed should not be planted before the ground becomes warm and dry, as the young plants are very sensitive to cold and wet. When the plants have formed the first pair or rough leaves, they should be thinned, so as to leave two or three of the strongest and best to each hill. Frequent watering of the plants with liquid manure will hasten the growth, thus diminishing the danger from insect pests.

"KLECKLEY SWEETS"

This famous "Sweetest of All" Water Melon, first introduced eleven years ago, has become immensely popular. In superb, luscious flavor, it is equalled only by one other melon—the new Halbert Honey. While the skin is too tender to

admit of fruits being shipped any distance to market, it is most desirable to plant for home use of nearby markets. Fruits are oblong in form, dark green skin; very thin rind. Flesh bright scarlet, with broad, solid heart; the white seeds are placed close to the rind. Flesh most crisp, sugary, and melting in the highest degree; entirely free from stringiness. The melons average eighteen to twenty inches in length by ten to twelve inches in diameter; of handsome appearance and the melons ripen quite early, and we consider it a most desirable variety for the home garden. For the seed grown by the originator, Mr. Kleckley, upon his home ranch in Texas, we charge:



Per Pkt., 10c; oz., 15c; 2 oz. for 20c; $\frac{1}{4}$ lb., 35c; per lb., \$1.25, postpaid. For our other choice seed (grown from the original stock) we charge: Per pkt., 5c; oz., 10c; $\frac{1}{4}$ lb., 30c; per lb., \$1.00, postpaid.

WRITE FOR SPECIAL PRICES ON LARGE QUANTITIES

WATERMELON—CONTINUED

EARLIEST WATERMELONS

The best of all the early ripening watermelons is our Fordhook Early described below. The melons will weigh thirty to forty pounds each; have a deep green skin, which is tough enough to stand shipping. Phinney's Early is oblong, with tough mottled skin. Cole's Early, an extra early selection of Kolb's Gem; it is small and round, with rather tender skin. Our Hungarian Honey is a very early melon, but small in size, of ball-like or round form; quite thin and deep red flesh of finest quality.



Burpee's "Halbert Honey" Watermelon—The finest of all watermelons for the home garden and for local markets. Halbert Honey fully equals the Kleckley Sweets in superb, luscious flavor, and has fruits more even and regular in outline, with a darker, richer colored skin. The vines are of strong, vigorous growth, and set fruits very freely—four or five fine large melons are frequently seen clustered closely together. Will ripen choice fruits even in the Northern States if planted in a good location. The melons average eighteen to twenty inches long, and are full or bluntly rounded at both ends. The skin is a dark, glossy green. The flesh is a beautiful crimson, the rich coloring and luscious quality extending to the thin rind. A number of planters who sell melons in nearby markets report that the new Halbert Honey will outsell any other variety, and frequently brings double the price of other sorts—even when the markets are well supplied with other melons. Choice selected stock. Per pkt., 10c; oz., 15c; ¼ lb., 40c; per lb., \$1.50.

Sweet Heart—Most popular for market. Large, heavy fruits of oval or round form; skin very pale green, with distinct netted lines of a slightly darker shade. The large, handsome fruits bear shipping well. The solid flesh is a deep, rich red, crisp and melting; its luscious quality has made it a leading variety in our markets. Per pkt., 5c; oz., 10c; 2 ozs., 15c; ¼ lb., 25c; per lb., 75c, postpaid. By express: 65c per lb.

Kolb's Gem—Largely grown in the South for shipping to Northern markets, as it carries well. The melons are large, of a thick oval, blocky form. Skin handsomely marked in dark and light green stripes. Flesh brightly red but rather coarse and of only fair quality. Per pkt., 5c; oz., 10c; ¼ lb., 25c; per lb., 75c, postpaid. By express or freight, not prepaid: Per lb., 65c; 5 lbs. or more at 60c per lb.

"Iceberg," or Blue Gem—The melons are uniformly large, of thick oval form, slightly depressed at the blossom end. The color is rich, a dark green, with faint stripings of a lighter shade, but the whole fruit is much darker and richer in coloring than the Kolb Gem. The rind is exceptionally strong, making it an excellent shipper. The flesh is entirely free from stringiness, and of sweet sugary flavor. Seed black, plump, and quite hardy, admitting of early planting. Per pkt., 5c; oz., 10c; ¼ lb., 30c; per lb., 85c, postpaid. By express: Per lb., 75c; 5 lbs. or more at 70c per lb.

Burpee's Fordhook Early—Without a rival. This is the earliest large-fruited melon in cultivation—when grown from the genuine stock. Planted in hills six feet apart and without any special cultivation, producing a good number of the large melons before any other varieties had ripened, with the exception only of the small Cole's Early. These fruits are of good size, rather short and blocky in form, with large diameter. Skin dark green occasionally with faint stripes of lighter green. Flesh bright red, crisp, sweet and of splendid quality. Rind quite thin, but skin tough, making an excellent shipping variety. Per pkt., 5c; oz., 15c; ¼ lb., 40c; per lb., \$1.25, postpaid. By express, \$1.15 per lb.

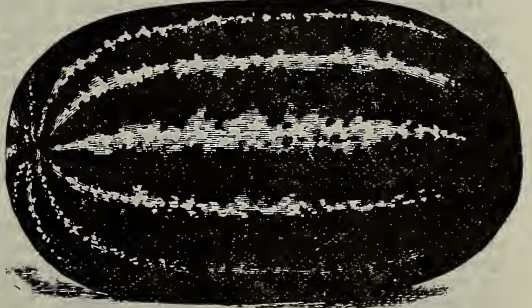
Burpee's Mammoth Ironclad—Large, heavy, oblong fruits, averaging two feet in length under good cultivation. Skin dark green, with bright stripes of lighter green in mottled markings. Rind thin, but tough, flesh bright red, firm, crisp, and free from stringiness. Large solid heart, with seeds near the rind. Will keep a long time after ripening. Per pkt., 5c; oz., 10c; ¼ lb., 25c; per lb., 85c, postpaid.

Gray Monarch, or Long White Icing—The skin is of an attractive mottled very light green color. The flesh is deep red in color, and of very fine quality—fully equal to the popular Round Light Icing. In size, this variety is larger, being of long form, and has been raised to weigh fifty to sixty pounds each. Per pkt., 5c; oz., 10c; ¼ lb., 30c; per lb., 85c.

Triumph—A splendid shipping variety of large size and handsome appearance. The melons are rather shortened in form, but thick through. Skin deep bluish green, with dark red flesh of excellent quality. Per pkt., 5c; oz., 10c; ¼ lb., 30c; per lb., \$1.00, postpaid.

Cuban Queen—The melons are of large size and oblong in form. Skin beautifully striped in dark and light green. Rind quite thin, but tough enough for shipping. Flesh bright red, firm and of luscious quality. Per pkt., 5c; oz., 10c; ¼ lb., 30c; per lb., 85c.

Dixie—This is a famous melon for market; the fruits are large, oblong in form, from twenty inches to two feet in length; skin dark green, with stripes of lighter shade. Bright red flesh of excellent quality. Per pkt., 5c; oz., 10c; ¼ lb., 30c; per lb., \$1.00, postpaid.



Cole's Early—Extra early but small; skin green, striped white. Per oz., 10c; ¼ lb., 30c; per lb., \$1.00.

Phinney's Early—An extra early; of medium size, oblong. Per oz., 10c; ¼ lb., 25c; per lb., 75c.

Burpees' Hungarian Honey—Small, round; rich red flesh. Per oz., 15c; ¼ lb., 40c; per lb., \$1.25.

Each of the above, 5c per pkt.

If ordered by express, deduct 10c per lb.

Ice Cream, or "Peerless"—An oblong melon, with dark green skin. Flesh sweet; deep pink. Per pkt., 5c; oz., 10c; ¼ lb., 30c; per lb., \$1.00, postpaid.

Colorado Preserving—This is a large fruiting strain of Citron for preserving. Flesh clear white and very solid. Olive-green seed. Per pkt., 5c; oz., 15c; ¼ lb., 40c; per lb., \$1.25.

CASABAS

Casabas have now become a commercial commodity, to be regarded as muskmelons and watermelons. They are a late variety of muskmelon, to be classed in a family by themselves.

Ten years ago, when Mr. Howland first grew the Winter Pineapple at Lankershim, he prophesied the Casaba would become a commercial product to be shipped from California like oranges, celery, cabbage, etc. This prophecy has come true. Last season the San Joaquin Valley Melon Growers' Association shipped several carloads of the Golden Beauty to Portland, Ore., netting them an average of \$1.50 per dozen. These melons were loaded in ordinary freight cars without ice, nor were they crated—merely shipped like watermelons. There was no loss from decay.

This is an encouraging start; now try Chicago and New York. The Golden Beauty and the Santa Claus will get there, all right.

Culture—In this climate all Casabas should be planted from May 1st to August 1st. They will then begin to ripen about the windup of the Canteloupe season, and continue until frost. At the first sign of frost all melons, even half-grown, should be put into a dry place, where they will ripen gradually, many of them will keep until March, particularly the Santa Claus.

J. & M. Santa Claus—The name is appropriate to this melon. You can send nothing more delicious to your Eastern friends for a Christmas present. The rind has the appearance of the mottled Pomegranate Muskmelon. The shell is hard and about one-eighth of an inch thick. There is no seed cavity. The seeds are embedded in a jelly-like pulp. The light green flesh is absolutely stringless. Its flavor excels anything in the melon line; it is in a class by itself. It is beyond description. To taste it is to realize the truth of this statement. Per pkt., 10c; oz., 20c; lb., \$2.50.

Golden Beauty—Similar in all respects to the well-known Winter Casaba, except that it has a beautiful yellow color, even before it ripens. Its beautiful color commands a ready sale. The grower and propagator says that in a mixed load of Casabas the buyers always selected this strain, so long as there was any on the wagon. Per pkt., 10c; oz., 20c; per lb., \$2.50.

MUSHROOM

Mushroom—The Mushroom is an edible fungus of which there are numerous varieties. We handle the ordinary commercial variety of a creamy white color, with loose gills, which underneath are of pinkish red, changing to liver color. The mushroom produces seed, and there is developed a white, fibrous substance in broken threads, called spawn, which is developed and preserved in horse manure, pressed in the form of bricks. Mushrooms can be grown in cellars, in sheds, in hotbeds, or sometimes in the open air, the great essential being a uniform degree of temperature and moisture. Our space is to limited here to give the necessary cultural directions.

Pure Culture Mushroom Spawn—By a newly discovered process of selection and grafting, the spawn is scientifically propagated, so that large, vigorous and finely flavored mushrooms are reproduced. Earlier, more productive and a marked improvement on wild spawn, either French or English. Brick (about 1 ¼ lbs.), postpaid, 40 cts.; 5 bricks, not prepaid, \$1.25.

PERKIN'S MAMMOTH LONG POD

Perkin's Mammoth Long Pod—The plant is dwarf-growing, even in size, and productive, maturing pods earlier than most sorts. The pods are long, slender, deep green, and remain tender much longer than most sorts. Per pkt., 5c; oz., 10c; 2 oz., 15c; ¼ lb., 20c; per lb., 60c.

DWARF WHITE

Dwarf White—The longest podded variety; the plants are two feet high and very productive. Produce pods long, greenish white, very thick and fleshy. Per pkt., 5c; oz., 10c; 2 oz., 15c; ¼ lb., 20c; per lb., 50c.

J. & M. Hybrid Casaba—This excellent Casaba grows to large size. Flesh nearly three inches thick and of excellent flavor. Many of you who have visited the market during the months of October and November must have noticed the melon and the fancy prices paid for it. Only a few growers had it in large quantities, and they sold for \$2.50 a crate, while in January it sold for \$2.50 a dozen for smaller sizes. It is a rampant grower, a large yielder, and bears up until killed by frost. The best time to plant is in June and July, and do not market them until well ripened. The increased demand for this melon will insure it a profitable late crop. Per pkt., 5c; oz., 20c; lb., \$1.50.

Improved Hybrid—Similar in all respects to the Popular Hybrid, except that it is of a dark green color, more flattened at the ends and claimed by the originator to be of a better flavor. This is claiming most too much, but it is as good, and its appearance will make it a better seller. Per pkt., 10c; oz., 25c; lb., \$3.00.

Winter Pineapple, or Casaba—This is the first of the Casabas introduced into America, and is the parent of a number of Hybrids, all of which excel it in excellence of flavor, but none equal it in keeping qualities. Per pkt., 5c; oz., 10c; lb., \$1.00.

White Favorite—We were almost discouraged in offering this melon, but we believed it would eventually win, because of its excellent flavor. We are indebted to Mr. Sebelius for the present popularity of this melon. Two years ago he planted two acres, and, although slow to sell at first, before the crop was sold, he wished he had four acres; he has planted them every season since. Per pkt., 10c; oz., 20c; lb., \$2.00.

Genoa Casaba, or Italian Winter Melon—This melon should be in every family garden here, as it is in Italy. No home in Southern Italy is complete without these melons stored away for winter consumption. They will keep nearly as long as the Santa Claus. They are specially prized for their pleasing fragrance and most delicious flavor. Per pkt., 10c; oz., 25c; lb., \$3.00.



OKRA or GUMBO

Okra, or Gumbo—Cultivated for its young seed pods which are used in soups, or stewed and served like asparagus. It is highly esteemed in the South. Plant in hills about four feet apart, putting six to eight seeds in a hill, and after the plants are well started cut out all but two. The dwarf sorts can be planted much closer in hills, two to three feet apart, or in drills two feet apart, thinning the plants to about one foot apart in the row. Gather the pods when quite green and about an inch and one-half long.

MUSTARD

Mustard is not only used as a condiment, but the green leaves are used as a salad or cut and boiled like spinach. Sow as early in the spring as the ground will permit, in drills about eighteen inches apart, covering one-half inch deep. For succession, sow every few weeks till autumn. Water freely. In the South the seed should be sown in autumn and the plants used early in the spring as a salad and for greens.

WHITE ENGLISH

White English—Leaves comparatively smooth and deeply cut; color medium dark green. The plant is upright in growth inclined to branch as it approaches early maturity and soon bolts to seed. Per pkt., 5c; 2 oz., 10c; ¼ lb., 15c; per lb., 35c.

“FORDHOOK FANCY”

“Fordhook Fancy”—The plants, of vigorous growth have beautiful dark-green leaves, which curve outwardly like a fine ostrich plume. It is most productive from early spring sowings, and also most stubborn in running to seed. It stands well, even during the hot summer months. By making several sowings a few weeks apart a continuous growth of fresh tender leaves may be had throughout the season. Even those who do not care for mustard as a piquant salad will be delighted with the leaves of “Fordhook Fancy” cooked like spinach any time during the summer. It is even superior to the best spinach in flavor. Try it! Per pkt., 10c; oz., 15c; ¼ lb., 40c; per lb., \$1.25, post-paid.

SOUTHERN GIANT CURLED

Southern Giant Curled—Leaves light green, frilled and much crimped at edge. Highly esteemed in the South for its vigorous growth and good quality. Per pkt., 5c; oz., 10c; 2 oz., 15c; ¼ lb., 20c; per lb., 65c.

NASTURTIUM

Nasturtium—Tall mixed garden. Cultivated not only for ornament, but its beautiful orange-colored flowers serve as a garnish for dishes, and the young leaves are excellent for salads. The green seed pods preserved in vinegar make a pickle greatly esteemed by many. Per pkt., 5c; oz., 10c; 2 oz., 15c; ¼ lb., 25c; per lb., 75c.

HUMAN

Human—I take pride in all my shipments. However, I am but human, and occasionally make mistakes, like other poor mortals; but when I make a mistake I want to remedy it. If in the course of business with me you find an error or mistake on my part, please write a letter with a plain statement of facts, and you may depend upon receiving honorable and pleasant treatment. Don't get angry and come at me like going to war. I pride myself on having a large warehouse full of patience, but am not indifferent to facts pleasantly stated, and separated from abuse.

FERTILIZERS

FERTILIZERS RECOMMENDED FOR VARIOUS CROPS UNDER AVERAGE CONDITIONS.

Average Fertilizer for Grain Crops:

Use 200 to 600 pounds per acre of a fertilizer containing:

Actual Potash.....	6 per cent.
Available Phosphoric Acid....	8 per cent.
Nitrogen.....	2 per cent.

Raw materials equivalent to one ton:

250 lbs. Muriate of Potash.
1,150 lbs. Acid Phosphate.
260 lbs. Nitrate of Soda.

For grain, in which clover or grass is to be seeded, a mixture of

Ground Bone.....	800 pounds.
Acid Phosphate 14 per cent....	800 pounds.
Muriate of Potash.....	400 pounds.

Applied at the rate of 200 to 300 pounds per acre, is used to good advantage.

When wheat runs to straw or lodges, owing to use of barnyard manure or clover, drill in a mixture of 200 lbs. Acid Phosphate and 30 lbs. Muriate of Potash. Use no Nitrogen in fertilizer in such cases.

On thin land it is sometimes advantageous to give an additional top-dressing of Nitrate of Soda in the Spring.

Average Fertilizer for Potatoes and Sugar Beets:

Use 1,000 to 1,500 pounds per acre of a fertilizer containing:

Actual Potash.....	10 per cent.
Available Phosphoric Acid....	6 per cent.
Nitrogen.....	3 per cent.

Raw materials equivalent to one ton:

425 lbs. Sulfate of Potash.
850 lbs. Acid Phosphate, 14 per cent.
400 lbs. Nitrate of Soda.

Average Fertilizer for Garden Crops:

Use 1,000 to 1,200 pounds per acre of a fertilizer containing:

Actual Potash.....	9 per cent.
Available Phosphoric Acid	6 per cent.
Nitrogen.....	5 per cent.

Raw materials equivalent to one ton:

375 lbs. Sulfate of Potash.
850 lbs. Acid Phosphate, 14 per cent.
675 lbs. Nitrate of Soda.

Average Fertilizer for Corn:

Use 200 to 500 pounds per acre of a fertilizer containing:

Actual Potash.....	8 per cent.
Available Phosphoric Acid.....	6 per cent.
Nitrogen.....	2 per cent.

ONIONS



The Onion not only contains considerable nutriment, and has valuable medicinal properties, but is most useful in counteracting the bad effects of sedentary life. The disagreeable odor it imparts to the breath may be avoided in a great measure by thorough cooking, or by eating a few leaves of parsley.

In Onion culture thorough preparation of the ground, careful sowing and the best of after culture, though essential for full yield, will avail nothing unless seed of the best quality be used. Given the same care and conditions, the product from two lots of onion seed of the same variety, but of different quality, may be so unequal in the quantity of merchantable onions that it would be more profitable to use the good seed though it cost twenty times as much as the other. Our thorough equipment and long experience in growing onion seed of the very best quality enables us to say, without hesitation, that our stock is fully equal to any and superior in quality to most that is offered. Although onions are often raised from sets and from division, by far the best and cheapest mode of production is from seed. The facility with which seed is sown and the superior bulbs it produces recommend it for general use.

HOW TO RAISE ONIONS

The Soil—A crop of onions can be grown on any soil which will produce a full crop of corn, but on a stiff clay, very light sand or gravel, or on some muck or swamp lands, neither a large nor a very profitable crop can be grown. We prefer a rich loam, with a slight mixture of clay. This is much better if it has been cultivated with hoed crops, kept clean from weeds and well manured for two years previous because if a sufficient quantity of manure to raise an ordinary soil to a proper degree of fertility is applied at once, it is likely to make the onions soft. The same result will follow if we sow on rank mucky ground or on that which is too wet.

Manuring—There is no crop in which a liberal use of manure is more essential than in this, and it should be of the best quality, well fermented and shoveled over at least twice during the previous summer to kill weed seeds. If rank, fresh manure is used, it is liable to result in soft bulbs with many scallions. Of the commercial manures, any of the high grade, complete fertilizers are good for ordinary soils, and even very rich soils are frequently greatly benefited by fine ground bone, and mucky ones by a liberal dressing of wood ashes.

Preparation—Remove all refuse of previous crops in time to complete the work before the ground freezes up and spread the manure evenly at the rate of about fifty cart loads to the acre. This should first be cultivated in and the ground plowed a moderate depth, taking a narrow furrow, in order to thoroughly mix the manure

with the soil. Carefully avoid tramping on the ground during the winter. Cultivate or thoroughly stir the soil with a deep working cultivator or harrow as early in the spring as it can be worked, and then in the opposite direction with a light one, after which the entire surface should be made fine and level with a smoothing harrow or hand rakes. It is impossible to cultivate the crop economically unless the rows are perfectly straight; to secure this, stretch a line along one side, fourteen feet from the edge and make a distinct mark along it; then having made a wooden marker, something like a giant rake with five teeth about a foot long and standing fourteen inches apart, make four more marks by carefully drawing it with the outside tooth in and the head at right angles to the perfectly straight mark made by the line. Continue to work around this line until on the third passage of the marker you reach the side of the field where you began; measure fifteen feet two inches from the last row, stretch the line again and mark around in the same way. This is better than to stretch a line along one side, as it is impossible to prevent the rows gradually becoming crooked, and by this plan we straighten them after every third passage of the marker.

Sowing the Seed—This should be done as soon as the ground can be gotten ready, and can be done best by a hand seed drill. This should be carefully adjusted to sow desired quantity of seed about one-half inch deep. The quantity needed will vary with the soil, the seed used and the kind of onions desired. Thin seedling gives much larger onions than thick seedling. Four or five pounds per acre is the

MARKET GARDENERS AND ONION GROWERS WHO USE LARGE QUANTITIES OF ONION SEED WILL PLEASE WRITE FOR WHOLESALE PRICES.

ONIONS—CONTINUED

usual quantity needed to grow large onions. We use a drill with a roller attached, but if the drill has none, the ground should be well rolled with a light hand roller immediately after the seed is planted.

Cultivation—Give the onions the first hoeing just skimming the ground between the rows as soon as they can be seen in the row. Hoe again in a few days, this time close up to the plants, after which weeding must be begun. This operation requires to be carefully and thoroughly done. The weeder must work on his knees astride the row, stirring the earth around the plants, in order to destroy any weeds that have just started. At this weeding or the next, according to the size of the plants, the rows should be thinned, leaving from eight to twelve plants to the foot. In ten days or two weeks they will require another hoeing and weeding similar to the last and two weeks later give them still another hoeing, and if necessary another weeding. If the work has been thoroughly done at the proper time, the crop will not require further care until ready to gather.

Gathering—As soon as the tops die and fall, the bulb should be gathered into windrows. If the weather is fine they will need no attention while curing, but if it is not they will need to be stirred by simply moving them slightly along the row. Cut off the tops when perfectly dry, about half an inch from the bulb and then after a few days of bright weather the onions will be fit to store for winter.

Oregon Yellow Danvers—This is the variety planted almost entirely in the Northwest, particularly in Oregon. The largest crops of onions and the best keepers, bringing the highest prices in the Oregon and California markets are the Oregon Yellow Danvers. The bulbs are uniformly large, of a half-globe in shape, with small necks.

It is the earliest, largest in size, most perfect in shape, the largest cropper and the best keeper and as a market or table onion cannot be excelled.

Our seed is grown specially for us by the best onion seed growers in Oregon. No onion grower can afford to plant anything inferior when such seed can be obtained. Pkt., 5c; oz., 20c; ¼ lb., 40c; lb., \$1.25, postpaid.

Prize Taker—This most popular large yellow onion has been developed and acclimated from the large Spanish onions. All gardeners are familiar with the large size, handsome appearance and high prices of these imported Spanish onions as shown in the fruit stores of our Eastern cities during the fall months. From our home grown seed of Prize Taker it is possible for American growers to produce equally large, better ripened and better keeping onions of the same fine type. This strain is especially satisfactory where the plants are started very early under glass and transplanted to produce the very largest specimen onions as sold in crates in the fruit stores; it will also produce fine onions of four inches in diameter from seed sown in the open ground early in the spring. The onions grow to very large size, nearly round in form, with a very thin skin of a light straw-yellow. The flesh is pure white, firm or solid, crisp and very mild in flavor—especially desirable for slicing for salads, etc.

Our seed of Prize Taker has been grown from onions selected with special reference to uniformity in size, form and coloring, and can be depended upon to produce the best results where given special cultivation by the transplanting method as well as a fine market crop under ordinary conditions. Per pkt., 10c; oz., 20c; ¼ lb., 60c; per lb., \$1.50, postpaid.

Australlian Brown—Extra large, a sure cropper, and extra long-keeping. The bulbs somewhat resemble the Danvers in size and form, but are thicker through, thus yielding a larger crop both in bulk and weight, and mature earlier. The skin is generally of a bright reddish brown, while the flesh is always white, crisp, extremely solid, and of sweet mild flavor. Bulbs have been kept in fine condition for a year after they were harvested. Per pkt., 5c; oz., 20c; ¼ lb., 50c; per lb., \$1.50, postpaid.

Large Yellow Globe—The true Southport Yellow Globe is particularly valuable for winter markets. Some seedmen in New England, who have a great reputation for Globe Danvers use this more perfectly globe-shaped Southport

strain, but we do not approve of taking two varieties of seed out of the same bag! Both have their merits and we keep each distinct.

The onions are similar in size and form to the Red Globe, but have a pale straw-yellow skin. They are larger in size and more perfectly globe-shaped than the Globe Danvers. They are excellent keepers and of mild flavor. A heavy cropper, and from its handsome appearance sells readily in all markets. Our selected strains of seed is unsurpassed. Per pkt., 10c; oz., 25c; ¼ lb., 75c; per lb., \$2.75.

Extra Large Red Wethersfield Onion

This is the most popular standard variety for winter market in many Northern States. It is not an early ripening sort, but continues in growth throughout the season and consequently makes very large onions. Though well flattened, the solid onions are thick through. The outer skin is a deep rich purplish red, smooth and glossy; flesh white, lightly tinged with pinkish rose. The large solid onions keep well to hold crops for late winter markets. Per pkt., 5c; oz., 20c; ¼ lb., 60c; per lb., \$1.50, postpaid.

Large Red Globe—The handsomest and most richly colored of all red onions. The onions measure two and a half to three inches in diameter, and are remarkably uniform in size. The extra dark rich coloring makes a most attractive appearance when prepared for market. The plants are thin-necked, ripening down to a hard solid ball—insuring the largest percentage of market onions and the best keeping qualities. Our stock is extra choice. Per pkt., 10c; oz., 20c; ¼ lb., 60c; per lb., \$2.00, postpaid.

Extra Early Red—A well-flattened but quite deep early red onion, which yields abundantly, keeps well, and is of mild flavor. Per pkt., 5c; oz., 20c; ¼ lb., 60c; per lb., \$2.00, postpaid.

Onion Sets and Bulbs

It is cheaper to raise onions directly from the seed. Many persons with small gardens, however, still prefer to use sets. Gardeners also plant sets for bunch onions to pull early in the spring, and for the earliest ripening bulbs. We frequently have calls for sets of the Red Wethersfield and large Italian onions. These we cannot supply. Prices by the bushel vary with the market—please write for quotations.

Yellow Onion Sets—These will produce handsome well-ripened bulbs of large size quite early in the summer. Per pint, 20c; quart, 35c, by mail. By express: quart, 25c; 4 quarts, 65c; peck, \$1.10; per bushel (35 lbs.) \$4.00.

Potato Onion—Valuable for bunching or an early crop. The smallest sets make fine bulbs of good size, while the larger ones produce a cluster of small to medium-size bulbs. Light brown skin; mild white flesh. It is the earliest, most vigorous in growth, and easiest to cultivate of all onions from sets. For the family garden, whether pulled green or as dry bulbs, they are most excellent. Per pint, 25c; quart, 40c, postpaid.

TOP SETS.

Produced in clusters. Per lb., 30c, postpaid.

SHALLOTS.

Valuable for bunching or for an early crop. The smallest sets make fine bulbs of good size, while the larger ones produce a cluster of small to medium-sized bulbs. Light brown skin; mild, white flesh. Per lb., 30c, postpaid.

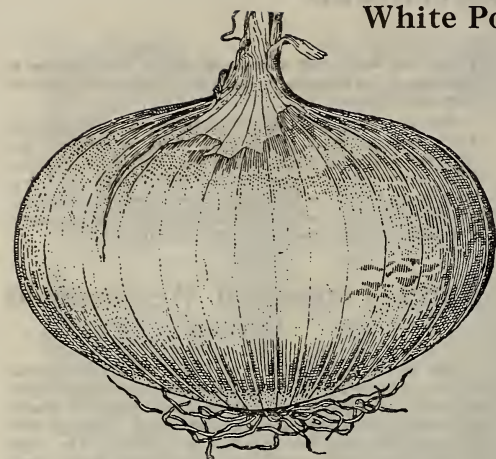
ONIONS — Continued

White Portugal, or American Silverskin

A medium sized onion of mild flavor and with beautiful, clear white skin, a favorite with many for use when young as a salad or bunching onion and for pickles; it is also a good keeper and fine for fall and early winter use. An excellent sort for gardeners who do not care to plant more than one variety. Pkt., 5c; oz., 30c; 2 oz., 55c; ¼ lb., \$1.00; lb., \$2.50.

White Globe

Yields abundantly, producing handsome and uniformly globe shaped bulbs. The flesh is firm, fine grained, of mild flavor and as a table variety its clear white color is exceptionally attractive. Sometimes called Southport White Globe. To produce the beautifully white onions so much sought in every market, one must first of all have good seed; second, grow them well on rich lands; third, exercise great care in harvesting and curing the crop. In Southport they "cord" up the onions in long rows, the bulbs on the inside and cover with boards, so that the bulbs in the open air are well protected from rain or dew which would be sure to discolor them. We have by years of careful selection and breeding developed a strain which has no equal in



uniformity and beauty of shape and color. (See colored plate opposite.) Pkt., 5c; oz., 30c; 2 oz., 55c; ¼ lb., \$1.00; lb., \$2.50.

Burpee's Mammoth Silver King Onion

This splendid large white Onion was first introduced in 1884, and quickly became a leading popular sort to grow for market in many localities. The large bulbs are of attractive form, flattened but quite thick through. Under good cultivation the average diameter is from five to seven inches, single bulbs often attaining a weight of from two to three pounds each. The thin skin is a clear silvery white, flesh snow-white, sweet and tender. They grow quickly, mature quite early and sell well in autumn and early winter. Per pkt., 5c; oz., 20c; ¼ lb., 60c; lb., \$2.00.

Queen

An extra early, very white skinned variety of especial value for pickling. If seed is sown out of doors in spring it will produce bulbs about an inch in diameter. If these bulbs are set out the following spring, or if plants are grown under glass in winter and set out in the spring, they will produce large onions. This variety is the one most generally used in this country for producing the small pickling bulbs. For this purpose growers usually plant the seed thickly in drills fifteen inches apart and use forty to fifty pounds to an acre. Pkt., 5c; oz., 20c; 2 oz., 35c; ¼ lb., 60c; lb., \$1.75.

Extra Early Barletta

(True French Stock.)—Is fully two or three weeks earlier than the Early White Queen, which heretofore has been the earliest variety in cultivation. They are of pure paper white color, very mild and delicate in flavor, from 1 inch to 1½ inches in diameter and three-fourths of an inch in thickness. Pkt., 5c; oz., 20c; ¼ lb., 65c; lb., \$2.00.

White Bermuda

A very early variety, used largely in the South as an early market onion, when the seed is sown in the fall and the onions harvested in the spring. It is mild and of particularly fine flavor. The color is a pinkish-straw color, and the shape is flat. The seed we offer is grown in Teneriffe, Canary Islands, and is a fine pure strain. This is the principal variety shipped in crates from Texas and Imperial Valley early in the spring. Pkt., 5c; oz., 45c; ¼ lb., \$1.25.

Okra, or Gumbo

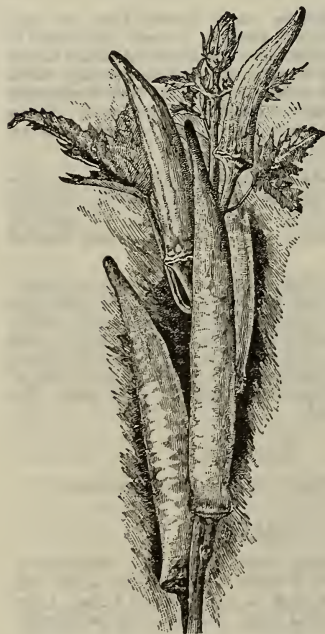
Cultivated for its young seed pods which are used in soups and stews. It is highly esteemed in the south. Plant in hills about four feet apart, putting six to eight seeds in a hill and after the plants are well started, cut out all but two. The dwarf sorts can be planted much closer in hills, two or three feet apart or in drills two feet apart, thinning the plants to about one foot apart in the row. Gather the pods when quite green and about an inch and one-half long.

White Velvet

A great improvement on the old White or the Green. The plant is of medium height, bearing a large crop of white, smooth pods which retain their tenderness until nearly full sized. Pkt., 5c; oz., 10c; 2 oz., 15c; ¼ lb., 20c; lb., 60c.

Perkins' Mammoth Long Pod

The plant is dwarf growing, even in size and productive, maturing pods earlier than most sorts. The pods are long, slender, deep green and remain tender much longer than most sorts. Pkt., 5c; oz., 10c; 2 oz., 15c; ¼ lb., 20c; lb., 60c.



PARSNIPS

Parsnips are usually grown on deep, rich, sandy soil, but will make good roots on any soil which is deep, mellow and moderately rich. Fresh manure is apt to make the roots a little coarse and ill shaped. As the seed is sometimes slow to germinate, it should be sown as early as possible in drills two and one-half feet apart, cover one-half inch deep and press the soil firmly over the seed. Give frequent cultivation and thin the plants to three or four to the foot.



Guersney—(Improved Half-Long)—The roots do not grow so long as the Hollow Crown, but are of greater diameter and more easily gathered. The roots are very smooth; the flesh is fine grained and of most excellent quality. Per pkt., 5c; oz., 10c; $\frac{1}{4}$ lb., 20c; per lb., 55c.

Long Smooth, or Hollow Crown—(Abbot's Improved Long Sugar, or Long White Dutch Parsnip.) A great cropper; tender, sugary, and considered the best for general cultivation. Per pkt., 5c; oz., 10c; $\frac{1}{4}$ lb., 20c; per lb., 50c.

PEPPER

Peppers are used very extensively as a condiment. In Mexico the hot varieties are eaten raw as we would eat radishes, but the greatest use is for seasoning other dishes. The large, thick-fleshed, sweet varieties are eaten more extensively farther north and are served in various ways, green or ripe, with vinegar and salt, like tomato salad, or made into mangoes, by cutting one side, removing seeds and filling with chow chow pickles.

The culture of peppers is the same as for egg plant and the plants need quite as much heat to perfect them. Guano, hen dung, or any other bird manure hoed into the surface soil when the plants are about six inches high, will wonderfully increase the product and also improve the quality of the fruit.



Tabasco—Of all bush-like growth, three to four feet in height, producing an immense number of small, slender, very hot and fiery fruits one inch in length and vivid scarlet in coloring. This is the true variety, from which the famous Tabasco Sauce is made, but usually fails to ripen fruits as far north as Pennsylvania, by reason of its large growth. Per pkt., 10c; oz., 45c; $\frac{1}{4}$ lb., \$1.25; per lb., \$4.00.

PEPPER PLANTS, SEE PAGE 41.

PARSLEY



Parsley succeeds the best on rich, mellow soil. The seed is even slower than parsnip in germinating and should be sown as early as possible in the spring, in drills one to two feet apart and when the plants are well up thin to one foot in the row. When the plants are about three inches high cut off all the leaves; the plant will then start a new growth of leaves which will be brighter and better curled and later, if these turn dull or brown they can be cut in the same way; every cutting will result in improvement. The Moss Curled variety makes beautiful border plants.

Plain, or Single—Plain leaves, excellent flavor. Per pkt., 5c; oz., 10c; $\frac{1}{4}$ lb., 20c; per lb., 50c, postpaid.
Double Curled—Fine, dwarf, crimped leaves. Per pkt., 5c; oz., 10c; $\frac{1}{4}$ lb., 20c; per lb., 60c.

Extra Curled Dwarf, or Emerald—The moss-like leaves, of a handsome bright green color, are finely curled. Per pkt., 5c; oz., 10c; $\frac{1}{4}$ lb., 25c; per lb., 70c, postpaid.

Dark Moss-Curled—The leaves are of an extra dark-green color. Per pkt., 5c; oz., 10c; $\frac{1}{4}$ lb., 25c; per lb., 75c, postpaid.

Fern-Leaved—This is most exquisite in form and color—invaluable as a garnishing plant. Per pkt., 5c; oz., 10c; $\frac{1}{4}$ lb., 25c; per lb., 70c, postpaid.

Turnip-Rooted, or Hamburg—The edible portion is the fleshy root, which resembles a small parsnip, and is esteemed for flavoring soups, stews, etc. Per pkt., 5c; oz., 10c; $\frac{1}{4}$ lb., 20c; per lb., 60c.

Burpee's "Chinese Giant" Red Pepper

Double the size of Ruby King—The mild largest Red Pepper.

Not only is it immensely productive for so large a pepper, but its enormous size and magnificent appearance makes it sell most readily. The plants are vigorous in growth, but of stocky habit, seldom more than two feet in height. They are well branched and thickly set with enormous fruits. Frequently half a dozen peppers will touch each other, as if on a single bunch.

The strong growth of the plants enables them to mature the gigantic fruits only slightly later than our well-known Ruby King. The monstrous peppers are of thick blocky form and of most brilliant glossy scarlet. They grow four to five inches broad at the top and are of equal length, divided into four or more large ridges; when ripe they are indented at the blossom end. The fruits are uniformly of most "enormous" size, while the flesh is extremely mild—as sweet as an apple. They make an excellent salad sliced and served like tomatoes. The true seed of a select strain, producing uniformly large fruits, will always be high in price. Per pkt., 10c; $\frac{1}{4}$ oz., 20c; $\frac{1}{2}$ oz., 35c; oz., 60c.

Bull-Nose, or Improved Large Bell—The standard sweet-flavored scarlet sort. Plants two feet in height, prolific and quite early ripening. Sweet scarlet fruits three inches in length and two inches in diameter. Our stock is particularly fine; it is earlier than Ruby King. Per pkt., 5c; oz., 30c; $\frac{1}{4}$ lb., 85c; per lb., \$3.00, postpaid.

PEAS

For early peas the soil should be light and warm, but for general crop a moderately heavy soil is better. Fresh manure, and very rich or wet, mucky soil should be avoided, as they cause a rank growth of vine at the cost of the quality of the peas, such soil is often the cause of early sorts maturing unevenly. Sow as early as possible a few of some early variety on warm quick soil, prepared the fall before. The general crop can be delayed until later, but we have met with better success from sowing all the varieties comparatively early, depending for succession upon selecting sorts that follow each other in maturity. The peas will give quicker returns if covered only one inch deep, and where earliness is most important they may be treated in that way. Larger pods and more of them will be produced if the seed be planted in trenches three to six inches deep and covered with only one or two inches of soil; when the plants are five or six inches high fill the trench level with the surface; this will secure deep rooting, prevent mildew, and prolong the bearing season. If the peas be covered to the full depth at first, or if water be allowed to stand in the trenches, they will not germinate or grow well.

AMERICAN WONDER.

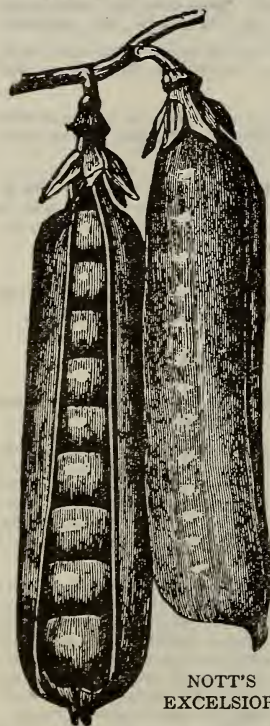
American Wonder—Of extremely dwarf growth, only eight to ten inches high and nearly as early as Alaska. The pods are filled with luscious, large, wrinkled peas of first-class quality. Per pkt., 10c; lb., 35c, postpaid.

PREMIUM JEM.

Premium Gem—Improved strain of McLean's Little Gem. Of dwarf growth maturing early—only about three days after American Wonder. The vines grow from twelve to fifteen inches in height, and are very productive; pods two and a half to three inches long, round and well filled with peas of delicious flavor. Per pkt., 10c; lb., 35c, postpaid.

NOTT'S EXCELSIOR.

Nott's Excelsior—See illustration; the cut peas show how closely they are packed in the pod. A very fine variety of compact dwarf growth, with pods one-third larger than those of the American Wonder, and maturing almost equally as early. The pods average three inches in length, and are well filled to the squared ends with large peas of unusually sweet flavor. Per pkt., 10c; lb., 35c, postpaid.



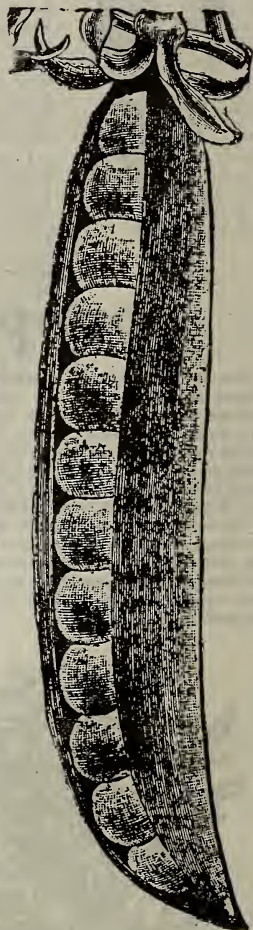
NOTT'S
EXCELSIOR.

TELEPHONE.

Telephone.—A tall-growing, late sort, three and a half to four feet in height, having pods of a very large size, containing six to seven large peas of delicious flavor. Continuous in bearing for quite a long time. Per pkt., 10c; lb., 35c, postpaid.

GRADUS.

This extra early, wrinkled pea bears pods of large size, and combines quality with earliness. It is very hardy; can be planted fully as early as the smooth peas; growth, vigorous and healthy; vines $2\frac{1}{2}$ feet in height; very prolific. The quality and flavor are delicious, and the peas remain tender and sweet for a long time. Pkt., 10c; lb., 35c, postpaid.



GRADUS.

LITTLE MARVEL.

We are sure that as soon as American gardeners, whether for pleasure or profit, become acquainted with Little Marvel they will drop both Little Gem and Nott's Excelsior, popular as these two varieties are today. The vines, of dwarf even growth, average fifteen inches in height and are heavily set with fine pods, frequently borne in pairs. The pods average two and one-half inches in length, are square at the bottom and well filled with six to seven quite large, deep green peas. The peas are ready for the table fully as early as American Wonder or Nott's Excelsior, while the pods are larger and the vines produce a much heavier crop. All who desire a fine early crop of the choicest quality of wrinkled peas will be delighted with Little Marvel. Per pkt., 15c; lb., 35c, postpaid.

IMPROVED STRATAGEM.

Improved Stratagem—Vines of strong growth, with large foliage, but only eighteen inches in height, and do not need any support. Pods of large size, well filled with large dark green peas of rich, sweet flavor. One of the very finest. Per pkt., 10c; lb., 35c, postpaid.

DWARF CHAMPION.

Dwarf Champion—This is a dwarf growing strain of the popular Champion of England. While growing only two feet in height, it retains all the excellence of the parent tall variety. The pods are three inches in length, round, and well filled to the end. Per pkt., 10c; lb., 35c, postpaid.

WRITE FOR SPECIAL PRICE ON LARGE QUANTITIES

PEAS—Continued

Magnificent

We like "Magnificent" better every year. It is just what the name implies, a magnificent pea. A robust grower, producing in **astounding profusion** large, handsome, deep green pods, closely packed with luscious, tender, sweet peas. A grand medium early pea for home and market garden; bears through a long season. Height, two feet. You will not be disappointed in this new variety. **Pkt., 10c; lb., 35c, postpaid.**

Carter's Daisy or "Dwarf Telephone"

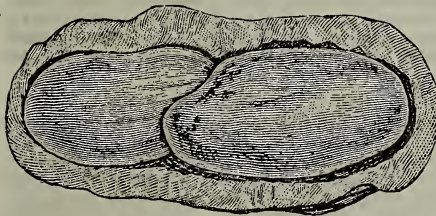
The vines, though growing only about eighteen inches in height, are very stout, and generally bear a good crop of large well-filled pods. The pods average five inches in length, containing seven to nine large peas of a light-green color, which are tender and sweet. **Pkt., 10c; lb., 35c, postpaid.**

PEANUTS

Oregon is being developed so rapidly and new orchards set out on every hand that many growers would be benefited by knowing that peanuts can be successfully raised between the rows with no injury to the trees. It being a leguminous plant and gathering numerous bacteria nodules upon the roots it is beneficial to the soil upon which it is grown, as the roots are left in the ground at harvest time.

The old method of covering the blossoms is entirely done away with and by practical experiment it has been found that hilling up and covering the blooms was not productive of as good results as to raise the vines on the flat surface and keep down all weed growths by proper cultivation and hoeing. Special tools are used by some extensive growers, but to those who wish to try it in a small way there are no tools to buy. Plow a light furrow and drop the seed, covering from two to three inches deep. Harvest with a suitable plow and handle vines with forks to free the nuts from the earth; then stack and cure.

Calves can be raised entirely on peanut straw and there is no better food for a lot of young porkers. The vines of the new variety average four feet across and stock will eat it all. If properly cured and stacked away from the rain there is no prettier hay than the peanut vine. Peanuts can be grown from April to November. Plant from April 15 to June 1.



Mammoth

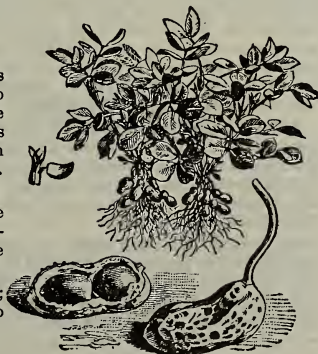
We are fortunate in being able to offer the Mammoth peanut in sufficient quantities to plant a large acreage. It is a new commodity and has not yet been offered to the public by peanut venders, but its size and large kernels of excellent eating qualities insures it a ready market wherever offered. **Price, per pkt., 10c; per lb., 50c, postpaid.**

Spanish Peanut

This is an excellent forage plant for light land in dry hot seasons. The tops are cut and cured for hay just before frost. The plants also set a large crop of the small nuts, which make an excellent fattening food for hogs, and the hogs may be pastured on the land after the hay has been gathered. The nuts mature much earlier than the larger southern varieties, and crops have been grown as far north as Michigan. Two bushels will plant an acre. **Per pkt. 10c; lb., 50c, postpaid.**

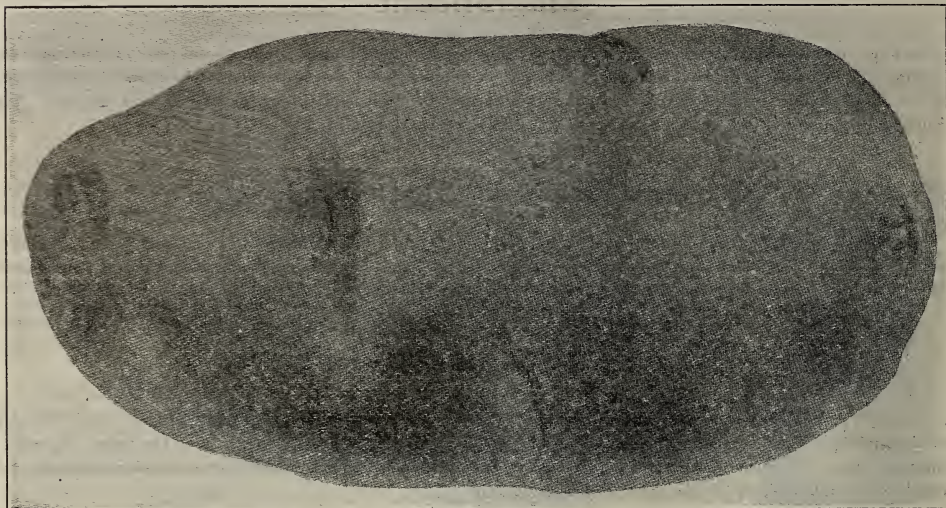
There are no better seeds in the world than the seeds we offer. We spare no pains nor expense to secure the best of everything. Our varieties are up-to-date. Call upon us in our new quarters and be convinced that our seeds are reliable and give the best results.

We are not in business merely to "make money." Our business is our pleasure; and it is certainly very unpleasant to have to disappoint friends who come to us year after year for their requirements in seeds.



SEED POTATOES

I can usually supply all the leading varieties. If you are interested write for prices, as I may have them.



DATE OF SHIPMENT.

Potatoes will be shipped at any date ordered, but where no special instructions are given to the contrary, we will hold same until in our judgment there will be no danger from freezing. The accompanying prices are based on values existing at the date of going to press with this catalog, January 1st. We are often able to make material reduction during the winter and spring to purchasers of large lots. Correspondence invited.

I can usually supply all the leading varieties of potatoes, if you are interested in a variety not listed here. Write for information, I may have, as I usually carry about 25 varieties in stock in the planting season.

AMERICAN WONDER—Late. The American Wonder is one of the best all-round white Potatoes in cultivation. A strong grower, a great producer, and one of the best medium-long late varieties for general field culture. The vines are very strong and branching, with dark green foliage. Tubers white, large, and uniform in size; elongated, slightly compressed, with few eyes which are nearly flush with the surface. In quality it is unsurpassed; either baked or boiled it is dry and floury, and has a rich, sweet flavor. Per lb., 25c; 3 lbs., 60c; By mail or express, prepaid. Per 100 lbs., \$2.50, by express or freight, not prepaid.

PRIDE OF MULTNOMAH—Our "Pride of Multnomah," originated near Portland, has more than fulfilled our greatest expectations, and the excellent reports from all sections confirm our statement that "Pride of Multnomah" is far in advance of all other main crop varieties as regards yield, size and uniformity, and table quality, being fine grained, of snowy whiteness, and for baking or boiling has no equal. Price, postpaid, per lb., 25c. Not prepaid, per 100 lbs., \$2.50.

EARLY ROSE—This variety has been a great favorite for many years and many growers still claim that it has never been excelled in quality and productiveness. Potatoes are long in shape, good size and light pink in color at the bud end. They cook mealy and are of the finest flavor. Per 100 lbs., \$2.50, not prepaid.

VICKTOR—This new potato, introduced in 1903, is rapidly gaining in popularity. Think of it! a white potato with the earliness of the Early Ohio, productiveness of the Rural New Yorker, and quality of the old favorite Snowflake. It cannot help becoming a permanent favorite with all who give it a trial. The plants are of strong healthy growth, producing tubers compactly. Tubers large, of uniform size,

roundish and slightly flattened; skin white, somewhat russeted. Either baked or boiled the flesh is dry and mealy. Its early ripening secures it from blight, and thus assures a large crop of sound tubers, which keep as well as the late varieties. Price, by mail or express prepaid, per lb., 25c; 3 lbs., 60c. Not prepaid, per 100 lbs., \$2.50.

"EUREKA" EXTRA EARLY—The vines resist drought to a remarkable extent and the crop is matured before the hot dry summer sets in. It is a week earlier than *Burpee's Extra Early*, and is an excellent keeper for so early a potato. We have eaten tubers which were in good condition the spring following. The firm white flesh is of good flavor when cooked, but not equal to *Burpee's Extra Early*. The tubers are quite broad and of a shortened oblong form, thick through, with few eyes. The skin is smooth and of a snowy whiteness. Per lb., 30c; 3 lbs., 75c; by mail, postpaid. By express or freight: Per peck 75c; per 100 lbs., \$2.50.

SELECTED STOCK FOR SEED.

With no other seed is the importance of change more essential than with potatoes, and by planting our well-grown seed you are assured of early maturity, increased yield and vigorous growth. The following varieties are we think, the best and most satisfactory sorts for growing for home or the Portland market. Order early as possible and we will reserve stock and ship when wanted.

"Earliest of All"

Never Known to Blight.

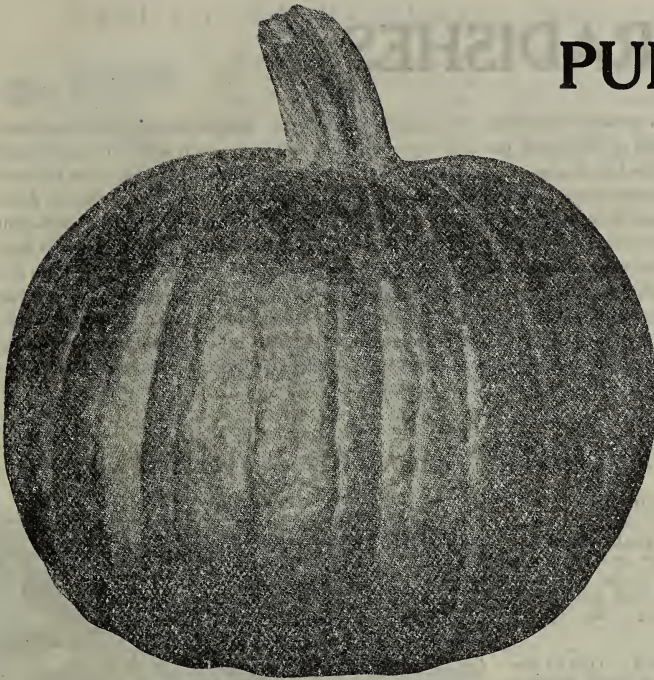
We have yet to find an early potato that can compare with our "Earliest of All." Its quick growth and early maturity give the ground for July planting, and a second crop can be grown the same season. Summer drought does not affect it, for its growth is complete before it can be injured. Planted early is ideal for "Dry Farming."

They can be had ready for baking nine weeks from planting, and fully matured in 12 weeks.

"Earliest of All" is a healthy, vigorous grower, not subject to blight or disease and does not make a second growth. Keeps as well as any late potato.

A handsome, shallow eyed, white-skinned potato of the finest table quality. Price, per lb., postpaid, 30c; 4 lbs., 80c., postpaid; by Freight or Express, per peck, 75c; ½ bu., \$1.25; bu., \$2.00; 100 lbs., \$3.00.

PUMPKINS



Pumpkins are not so particular in regard to soils as melons or cucumbers, but in other respects are cultivated the same, though on a larger scale. They are generally raised between hills of corn, but may be planted with success in fields by themselves. The pumpkin more properly belongs to the farm than the garden, especially as it really mixes with and injures the quality of the finer squash.

Large Cheese.—Large, round, flattened fruits, with creamy-buff skin; averages two feet in diameter. An excellent keeper; it has thick flesh of extra fine quality. Per pkt., 5c; oz., 10c; $\frac{1}{4}$ lb., 25c; per lb., 75c, postpaid.

By express or freight (not prepaid); 65c per lb.

Improved Dunkard.—This is a magnificent pie pumpkin, of most attractive appearance and finest quality. The form is nearly a perfect globe; skin reddish-orange, with bands of cream color. The flesh is thick, of a rich orange color, fine-grained, and of delicious flavor; keeps well all winter. Per pkt., 10c; oz., 20c; $\frac{1}{4}$ lb., 50c; per lb., \$1.75, postpaid.

Japanese.—Similar in size and form to the well-known Cushaw, but the skin is a deep green, with dark stripes, turning to a rich golden-yellow. Fruits mature early; the large neck is solidly meaty, and seeds are marked with curious indentations, resembling the characters of the Chinese alphabet. Flesh deep yellow, of fine quality. Per pkt., 5c; oz., 10c; $\frac{1}{4}$ lb., 30c; per lb., \$1.00, postpaid.

Genuine Mammoth, "Jumbo," or "King of the Mammoths."—This is the very best genuine strain of the true Mammoth Pumpkin. Fruits grow to enormous size, sometimes reaching two feet or more in diameter, and from one hundred to two hundred pounds in weight. Salmon-orange skin, very thick, bright-yellow flesh, which is fine-grained, tender and of excellent quality for pies. To raise the largest fruits, vines should be allowed ample space in which to grow—only one plant should be allowed to grow in a hill, and only the best fruit left on the vine. Per pkt., 10c; oz., 20c; $\frac{1}{4}$ lb., 50c; per lb., \$1.75, postpaid.

Small Sugar.—Fruits of small size, averaging about ten inches in diameter, of excellent keeping qualities, flattened or slightly ribbed. Skin deep orange-yellow, flesh sweet. Per pkt., 5c; oz., 10c; $\frac{1}{4}$ lb., 25c; per lb., 75c, postpaid.

"Big Tom," or Improved Large Field.—Vines of strong, vigorous growth and wonderfully prolific. Fruits will average fifteen to twenty inches in diameter; round or slightly oval in form. Smooth, hard, reddish-orange skin, slightly ribbed, with rich orange-yellow flesh. Frequently grown among corn to make a crop of pumpkins for feeding to dairy stock. Per pkt., 5c; oz., 10c; $\frac{1}{4}$ lb., 20c; per lb., 55c, postpaid. By express or freight, 45c per lb.

White Cushaw.—A popular crooked-neck variety with a hard creamy-white shell. Fruits two feet in length, with long, solidly-meaty neck; seeds are all located in the lower bulb-like end. Thick flesh of fine quality. Per pkt., 5c; oz., 10c; $\frac{1}{4}$ lb., 30c; per lb., \$1.00, postpaid.

Burpee's Quaker Pie.—A most prolific variety. The fruits are broad pear-shaped to slightly oval in form. Rich creamy-buff skin; flesh very fine-grained and rich in flavor. Stored in a warm dry place, it is an excellent keeper. Per pkt., 10c; oz., 15c; $\frac{1}{4}$ lb., 40c; per lb., \$1.25, postpaid.

Burpee's Golden Oblong.—Very hardy and productive, pumpkins fifteen to twenty inches in length and eight to ten inches in diameter. Skin of a rich golden orange, thin, but tough, making it almost as good a keeper for Winter as the hard-shelled squashes. Flesh is light golden-yellow, of very rich, fine quality. Per pkt., 5c; oz., 10c; $\frac{1}{4}$ lb., 25c; per lb., 75c, postpaid.

Rhubarb or Pie Plant

Rhubarb, familiarly known as Pie Plant, or Wine Plant, is cultivated in gardens for its leaf stalks, which are used for pies and tarts. Immense quantities are now annually sold in all the large markets. No private garden should be without it.

Culture.—Rhubarb succeeds best in deep, somewhat retentive soil, and the richer this is and the deeper it is stirred the better. Sow in drills an inch deep, and thin out the plants to six inches apart. In the fall transplant into very highly-manured and deeply-stirred soil, setting them four to six feet apart each way, and give a dressing of coarse manure every spring. The stalks should not be plucked until the second year, and the plant never allowed to exhaust itself by running to seed. Our seed is saved from selected plants of the Linnaeus Victoria, Giant and other improved sorts, but like the seeds of fruit trees, rhubarb seed cannot be relied upon to produce the same varieties. Pkt., 5c; oz., 15c; 2 oz., 25c; $\frac{1}{4}$ lb., 40c; lb., \$1.50. Rhubarb roots, by express, not prepaid, 10c each; \$1.00 per doz.; by mail, prepaid, 15c each; \$1.50 per doz.

WRITE FOR SPECIAL QUOTATIONS ON LARGE QUANTITIES

RADISHES

For forcing, sow in hotbeds or under glass in rich, sandy soil, made perfectly level. Scatter evenly over the surface from sixty to one hundred and fifty seeds to the square foot and cover with one-half inch of soil sifted on, and attend carefully to the watering and airing. If the bed is a good one, the whole crop can be marketed in twenty-one to forty days after planting. For open ground culture, sow on rich, sandy soil as soon as it is fit to work in the spring, in drills twelve inches apart and thin out the plants, if necessary, to prevent crowding. A good dressing of nitrate of soda will greatly stimulate growth and insure tender, brittle roots. Successional sowings from one week to ten days apart will keep up a supply. After the hot weather of summer begins, it is better to sow the summer and winter varieties, as they do not become tough and stringy nor pithy so quickly as the early sorts. Radishes are subject to root maggots, which make them useless for culinary purposes. We know of no certain remedy for this pest. We have found that the best preventive measures are to avoid the use of rank manure, and not to sow on ground where radishes, turnips or cabbage were grown the year previous. We have been very careful to secure the very best seed possible, and there is none sold under other names which is better than that of the varieties we offer.

EXTRA EARLY TURNIP-SHAPED VARIETIES

Earliest, or Improved "Scarlet Button."—This is a splendid strain of small, extra early, round, bright-red radish. We have frequently had them ready for use in eighteen to twenty days after sowing the seed. Skin is a bright scarlet; flesh pure white, crisp, tender and mild in flavor. Quite small quantity of top, and well suited for growing under glass. Per pkt., 5c; oz., 10c; $\frac{1}{4}$ lb., 20c; per lb., 50c, postpaid.

Early Scarlet Turnip, Scarlet Tipped.—One of the handsomest of the turnip radishes, and a great favorite in many large markets for early planting outdoors. It is but little later than the White Tipped, Forcing, and will give entire satisfaction where extreme earliness and small top are not chief considerations. Roots slightly flattened on the underside; color very deep scarlet, with a distinct white tip; flesh white and of the best quality. Per pkt., 5c; oz., 10c; 2 oz., 15c; $\frac{1}{4}$ lb., 20c; per lb., 55c.

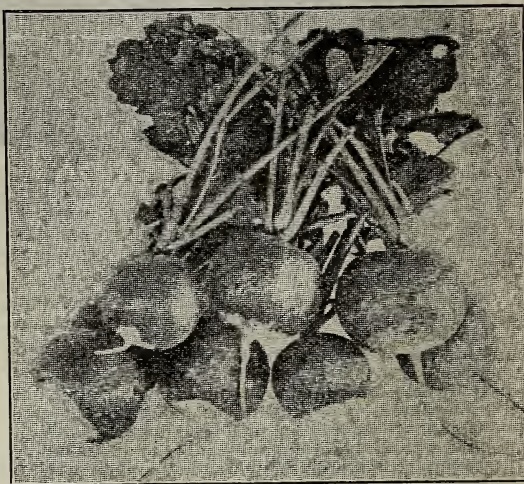
Crimson Giant Globe.—Early bright crimson; long-standing. Per oz., 10c; $\frac{1}{4}$ lb., 30c; per lb., 90c.

Burpee's Ruby-Pearl.—Brightest red, tipped pure white. Per oz., 10c; $\frac{1}{4}$ lb., 30c; per lb., \$1.00.

Each variety is 5 cents per packet. If ordered by express deduct 10 cents per pound.

Early Round Dark Red.—Very handsome; round, rich-colored. Per oz., 10c; $\frac{1}{4}$ lb., 25c; per lb., 75c.

Extra Early Scarlet Turnip—Standard Small; round, red. Per oz., 10c; $\frac{1}{4}$ lb., 25c; per lb., 75c.



SCARLET TURNIP WHITE TIPPED RADISH

RADISHES—EXTRA EARLY OLIVE-SHAPED

Burpee's Earliest White.—The beautiful little radishes are ready for the table in only sixteen to twenty days from sowing the seed. Of handsome olive shape, both skin and flesh are white, of clear mild flavor, crisp and tender. Per pkt., 5c; oz., 10c; $\frac{1}{4}$ lb., 30c; per lb., \$1.00. By express, 90c per lb.

French Breakfast.—Color bright carmine, with clear white in the lower portion. Very tender and mild. Per pkt., 5c; oz., 10c; $\frac{1}{4}$ lb., 25c; per lb., 75c. postpaid.

Bright Breakfast.—This is similar to the French Breakfast, but is of brightest scarlet, which contrasts finely with the clear white tip. Per pkt., 5c; oz., 10c; $\frac{1}{4}$ lb., 30c; per lb., 85c.

Scarlet Olive-Shaped.—A small, very early olive-shaped radish of rich brilliant color. Per pkt., 5c; oz., 10c; $\frac{1}{4}$ lb., 25c; per lb., 75c.

Burpee's Surprise.—Yellowish-brown skin; crisp, hard, white flesh of mild flavor. It retains fine flavor and crispness when fully grown. Per pkt., 5c; oz., 10c; $\frac{1}{4}$ lb., 30c; per lb., 90c.

White Olive-Shaped.—This is distinct from our Earliest White in being slightly larger in size and later in maturing. Per pkt., 5c; oz., 10c; $\frac{1}{4}$ lb., 25c; per lb., 75c.

SEEDS--

THE KIND THAT GROW
YOU CAN'T KEEP THEM
IN THE GROUND

EARLY LONG RADISHES—SPRING AND SUMMER



Early Long Scarlet Short Top—The finest strain of this most popular radish. The long, slender, handsomely-colored roots are most attractive in appearance. They are ready in about twenty-five days; crisp, brittle and of choicest quality. They reach a length of five to six inches, growing half out of the ground. Per pkt., 5c; oz. 10c; $\frac{1}{4}$ lb., 25c; per lb., 75c, postpaid.

Cincinnati Market ("Glass" Radish)—A strain of the Long Scarlet, growing to slightly larger size, fully as early and darker in coloring. Per pkt., 5c; oz., 10c; $\frac{1}{4}$ lb., 25c; per lb., 75c, postpaid.

White "Icicle"—The finest and longest of the very early pure white varieties. Planted in spring and the radishes are ready for use in twenty to twenty-five days. Their long, slender form and pure paper-white skin are most attractive when bunched for market. This radish is not only crisp and tender when young, but retains these qualities until the roots attain large size, so that it will remain in fine condition longer than any other first-early variety. It is excellently adapted for forcing purposes or successive sowing in the open ground, and gives a continuous supply of tender, crisp radishes throughout the season. Per pkt., 5c; oz., 10c; $\frac{1}{4}$ lb., 20c; per lb., 60c, postpaid.

Long Cardinal, or Long Brightest Scarlet—Similar to Long Scarlet, but not quite so long, and even brighter in color. The crisp, tender radishes grow quickly, and are quite attractive bunched for market. Per pkt., 5c; oz. 10c; $\frac{1}{4}$ lb., 25c; per lb., 75c, postpaid.

RADISHES—SUMMER VARIETIES

These attain a larger size than do any of the earlier radishes, and remain in fine condition longer without becoming pithy. Long White Vienna makes a handsome radish, with delicate white skin and crisp, mild flesh. Chartiers resembles somewhat the Long Scarlet, but is fully twice as large and considerably later; it remains in good condition longer than most other varieties. White Strasburg is a solid radish of fine quality, highly desirable for summer markets; by successive plantings a supply of fine radishes may be had all summer. Giant White Stuttgart is very late, of turnip shape and immense size. Large White Globe and Golden Globe are both popular varieties.

Chartiers, or Shepherd—Long; crimson, tipped with white. Per oz., 10c; $\frac{1}{4}$ lb., 25c; per lb., 75c.

Long White Vienna, or Lady Finger Radish—Excellent. Per oz., 10c; $\frac{1}{4}$ lb., 30c; per lb., 85c.

Large White Globe—A favorite summer variety. Per oz., 10c; $\frac{1}{4}$ lb., 25c; per lb., 75c.

Golden Globe—Yellow skin, white flesh; for summer use. Per oz., 10c; $\frac{1}{4}$ lb., 25c; per lb., 75c.

White Strasburg—A fine solid summer radish of large size. Per oz., 10c; $\frac{1}{4}$ lb., 30c; per lb., 85c.

Giant White Stuttgart—An immense white summer radish. Per oz., 10c; $\frac{1}{4}$ lb., 25c; per lb., 75c.

Each of the above, 5 cents per packet. If ordered by express, deduct 10 cents per pound.

RADISHES—WINTER VARIETIES

None of these late varieties grow well from spring-sown seed, and even if they did, would be too old and tough, hence the first sowings should not be made until the middle of June. Sowing for succession, especially of the Chinese varieties, may be made until the middle of August.

Long Black Spanish and Round Black Spanish are leading sorts of the solid winter type, having deep brown skin, differing only in form. Long White Spanish is identical with Long Black Spanish, excepting in the coloring of the skin.

Chinese Rose is of medium size, with bright, deep, rose-colored skin; the flesh is very solid, and it is a much better keeper than the other Chinese varieties—excepting only the new Round Scarlet.

The White Chinese ("Celestial") is the finest of all extra large radishes; the roots grow to immense size, averaging from twelve to fifteen inches in length and fully five inches in diameter; the large roots grow mostly above the surface, but are shaded from the sun by the abundant foliage so that the skin remains a pure paper-white; the flesh is always

crisp, mild and juicy. California Mammoth is of the same type, but not so large in size. One ounce of seed will sow 100 feet of drill.

New White Chinese—Best for autumn; of immense size. Per oz., 15c; $\frac{1}{4}$ lb., 40c; per lb., \$1.25.

California Mammoth White Winter—Long; of large size. Per oz., 10c; $\frac{1}{4}$ lb., 25c; per lb., 75c.

Chinese Rose, or Scarlet China—Excellent; good keeper. Per oz., 10c; $\frac{1}{4}$ lb., 30c; per lb., 90c.

Round Scarlet China—Extra fine round roots for winter. Per oz., 15c; $\frac{1}{4}$ lb., 40c; per lb., \$1.25.

Long Black Spanish—Black skin, white flesh. Per oz., 10c; $\frac{1}{4}$ lb., 25c; per lb., 75c.

Long White Spanish—White skin and flesh; keeps well. Per oz., 10c; $\frac{1}{4}$ lb., 25c; per lb., 75c.

Round Black Spanish—The favorite winter Rettig of Germany. Per oz., 10c; $\frac{1}{4}$ lb., 25c; per lb., 75c.

Each of the above, 5 cents per packet. If ordered by express, deduct 10 cents per pound.

Salsify or Vegetable Oyster

By express, deduct 10 cents per pound.

Salsify is one of the most delicious and nutritious of vegetables, and should be more generally cultivated for use in winter, when the supply of really good vegetables is so limited. It has a grassy top and long, white, tapering root, nearly resembling a slim parsnip. It assimilates closely to the taste and flavor of the oyster when properly cooked, and is a good substitute for it; very wholesome and nutritious. The roots are either boiled or mashed and made into delicious fritters.

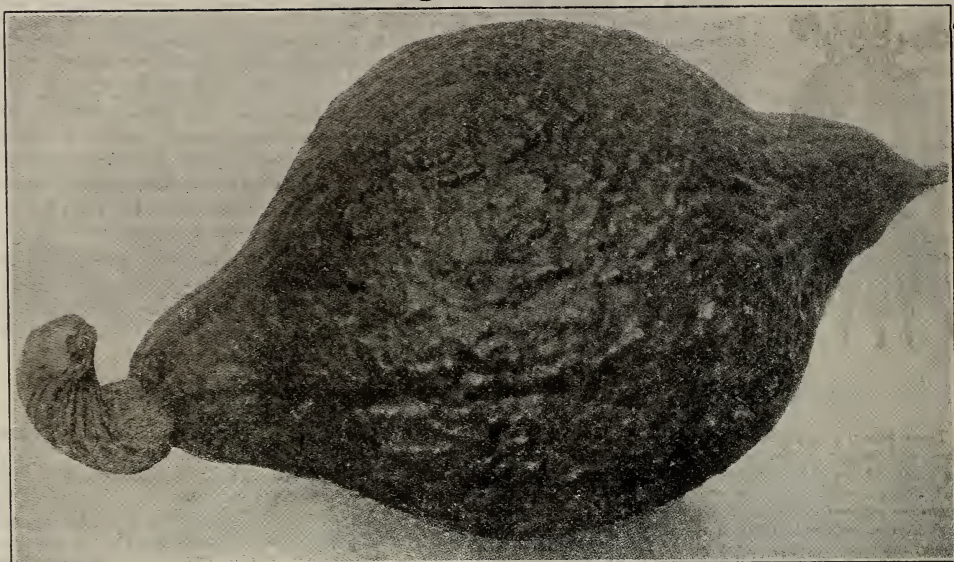
Culture—It succeeds best in a light, well-enriched soil, which should be stirred to a good depth. Coarse and fresh manure should be avoided, as it will surely cause the roots to grow uneven and illshaped. Sow early and quite deep,

giving the general culture recommended for parsnips. The roots are perfectly hardy, and may remain out all winter, but should be dug early in spring, as they deteriorate rapidly after growth commences. Store a quantity for winter use in a pit or in a cellar packed in damp earth or sand.

Long White—The well-known standard. Per pkt., 5c; oz., 15c; $\frac{1}{4}$ lb., 40c; per lb., \$1.50, postpaid.

Sandwich Island Mammoth—This grows uniformly to an extra large size, averaging fully double the size and weight of the roots of the old variety. The roots, notwithstanding their extra large size, are of very superior quality and delicate in flavor. Per pkt., 5c; oz., 20c; $\frac{1}{4}$ lb., 50c; per lb., \$1.75.

SQUASH



TRUE HUBBARD

The Squash is one of the most nutritious and valuable of all garden vegetables. The summer varieties come to the table early in the season, while the winter sorts can be had in perfection from August until the summer varieties are again in condition. Few farmers appreciate the value of winter squash as food for stock. We think an acre of squash, costing no more to cultivate and much less to secure, will give usually as much food available for feeding stock as an acre of corn, and we strongly urge our readers to try a "patch" for this purpose.

Culture—Squash plants are very tender and sensitive to cold, and planting must be delayed until warm weather. The general methods of culture are the same as those given for cucumbers and melons, but squash is less particular as to soil. The summer varieties should be planted four to six feet apart each way, and the winter sorts eight or ten. Three plants are sufficient for a hill. In gathering the winter sorts care should be taken not to bruise or break the stem from the squash, as the slightest injury will increase the liability to decay.

SUMMER SQUASHES

Mammoth White Bush Scallop—Many seedsmen have listed Mammoth White Bush Scallop Squash, but until in 1895, there was no uniformly large, clear white scalloped squash in trade. The fruit is a beautiful, clear waxy-white, instead of the yellowish-white so often seen in the old Early White Bush Scallop, and is superior to that variety in size and beauty. The handsomest of the scalloped squashes. Per pkt., 5c; oz., 10c; 2 oz., 15c; $\frac{1}{4}$ lb., 25c; per lb., 80c.

Early White Bush Scallop—A well-known variety of dwarf habit and upright growth. Color creamy-white; excellent for table use while young and tender. Per pkt., 5c; oz., 10c; 2 oz., 15c; $\frac{1}{4}$ lb., 25c; per lb., 75c.

Mammoth Yellow Bush—This is identical with the Mammoth White Bush, but the fruits are even larger and have a rich golden-orange skin as well as rich, creamy-yellow flesh. Per pkt., 5c; oz., 10c; $\frac{1}{4}$ lb., 30c; per lb., 85c, postpaid.

Giant Crookneck—This strain is equally as early as the common small-fruited variety, while the squashes grow to a much larger size, measuring from eighteen inches to two feet in length. Per pkt., 5c; oz., 10c; $\frac{1}{4}$ lb., 30c; per lb., 85c, postpaid.

Burpee's Fordhook Squash—This is a most desirable running variety for either summer or winter use. The vines are of strong, vigorous growth and wonderfully productive. Fruits oblong in form, eight to ten inches in length, slightly rigid, smooth, thin, yellowish skin; flesh very thick and of a light straw-yellow. If gathered young for cooking, no other Squash—except the new Burpee's Bush Fordhook—approaches it in flavor, while if allowed to ripen on the vine, they can be stored and will keep in excellent condition until late the following June. Either for baking like sweet potatoes or making pies during the winter, the quality is unsurpassed. Per pkt., 5c; oz., 15c; $\frac{1}{4}$ lb., 40c; per lb., \$1.25, postpaid.

Three Types of the Most Popular Winter Squash

True Hubbard—This is the well-known winter squash, now grown so largely throughout the country. Vines of strong running growth; fruits large, olive-shaped, with dark-green skin and very rich flesh. An excellent keeper and of splendid quality. Our strain is extra fine—(see the illustration, from photograph, above.) Per pkt., 5c; oz., 15c; $\frac{1}{4}$ lb., 40c; per lb., \$1.25, postpaid.

Warted Hubbard—This is similar in size and quality to the well-known Hubbard, while the large, dark, olive-green fruits are supposed to be slightly more heavily-warted. Very handsome in appearance; an excellent keeper and of splendid quality. Per pkt., 5c; oz., 15c; $\frac{1}{4}$ lb., 40c; per lb., \$1.25, postpaid.

Red, or Golden Hubbard—The heavily warted skin is of a rich orange-yellow, turning to deep salmon-red when ripened. It is equally as productive and fine in quality as the original Hubbard Squash. Per pkt., 5c; oz., 15c; $\frac{1}{4}$ lb., 40c; per lb., \$1.25, postpaid.

Burpee's Bush Fordhook Squash

Burpee's Bush Fordhook—In this new true bush type the plants can be grown much more closely together. The fruits are rather shorter and thicker than those of the running type; they are also thicker-fleshed, and have a smaller seed cavity. Our Fordhook Squash is about a week later than the Early White Bush, but is much sweeter and better flavored. An important advantage is, that any fruits not needed for summer use can be left to ripen on the plants and gathered for winter use. They are unsurpassed for baking, frying, or making pies, while stored in a dry place they will keep in good condition until the following June. Per pkt., 10c; oz., 15c; $\frac{1}{4}$ lb., 40c; per lb., \$1.50.

OTHER WINTER SQUASHES—Continued

Golden Bronze—The squashes are oval in form, thickest at the blossom end; skin dark grayish green, deepening to bronzy green when ripened; flesh thick, deepest orange-yellow in color, fine-grained and exceptionally sweet in flavor. It is a splendid keeper. Per pkt., 5c; oz., 10c; $\frac{1}{4}$ lb., 30c; per lb., \$1.00.

Pie Squash, or "Winter Luxury Pumpkin"—This is of smooth, rounded form, with rather thin, tender skin. The flesh is very thick, sweet, fine-flavored and excellent for pies. Per pkt., 5c; oz., 10c; $\frac{1}{4}$ lb., 30c; per lb., \$1.00, postpaid.

"The Delicious"—The squashes weighing from five to ten pounds, vary both in color and form, but are uniformly delicious in flavor and splendid winter keepers. The dark-orange flesh is very thick and fine grained. Per pkt., 5c; oz., 10c; $\frac{1}{4}$ lb., 30c; per lb., \$1.00, postpaid.

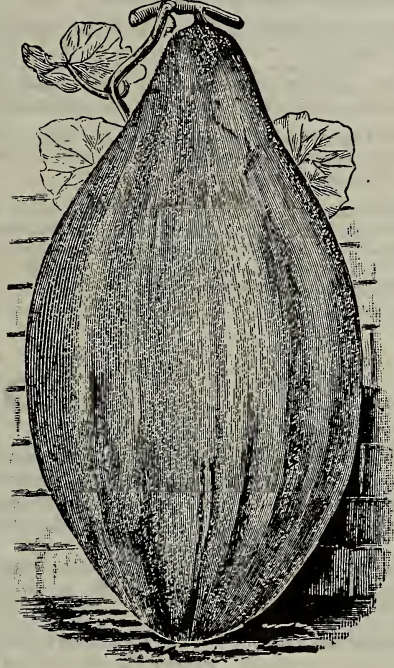
Pike's Peak—Large oval fruits tapering at the blossom end. Skin dark olive-green; light golden flesh of excellent quality. Vines of strong growth and very productive. Per pkt., 5c; oz., 10c; $\frac{1}{4}$ lb., 30c; per lb., \$1.00, postpaid.

Delicata—A small-fruited variety, suitable for both summer and winter use; oblong, slightly ribbed, with orange-yellow skin, striped with dark-green. Flesh thick and solid. Cooks dry, and is of rich flavor. Per pkt., 5c; oz., 10c; $\frac{1}{4}$ lb., 30c; per lb., \$1.00, postpaid.

Mammoth Chili—A very large-fruited variety. Under special cultivation the fruits attain a very great weight and are of attractive appearance. The skin is quite smooth, but with broad, open netting, and of a rich orange-yellow. Flesh very thick, of a rich yellow coloring; fine-grained and sweet. Per pkt., 5c; oz., 15c; $\frac{1}{4}$ lb., 30c; per lb., \$1.25, postpaid.

Mammoth Whale—(See illustration)—This is the "Jumbo" of the squash family, and creates great attention wherever grown or placed on exhibition. It is an extra large-fruited sort, quite distinct in form and appearance. The squashes grow from two and a half to three feet in

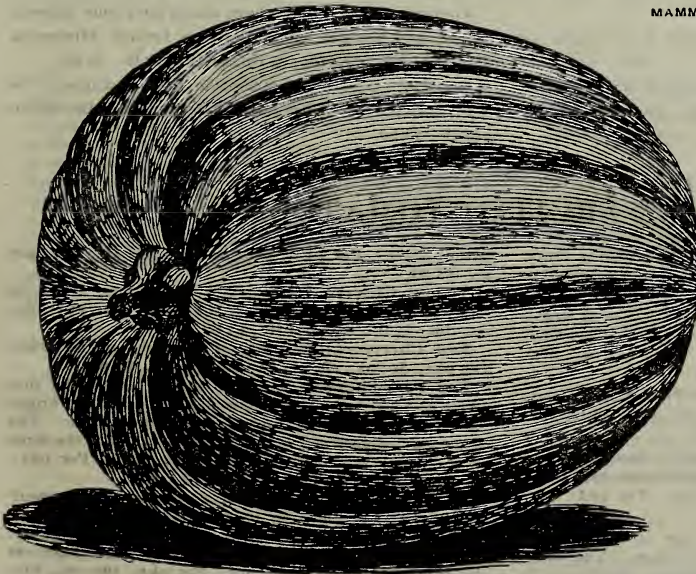
length, with a slight neck at the stem end. The large seed end is swelled to a width of twelve to eighteen inches and slightly flattened, giving a most distinct appearance, which suggests the name—"Mammoth Whale." The skin is of a dark olive-green, with slight stripes of a lighter tinge. The fruits frequently attain more than one hundred pounds in weight. Flesh firm and solid, of beautiful orange-yellow and excellent quality. Per pkt., 5c; oz., 10c; $\frac{1}{4}$ lb., 35c; per lb., \$1.25, postpaid.



MAMMOTH WHALE SQUASH.

Boston Marrow—A large-fruited, hard-shelled sort, for winter use, having bright orange skin and deep orange flesh. Vines of strong running growth, very productive; fruits thickish-oval. Per pkt., 5c; oz., 10c; $\frac{1}{4}$ lb., 30c; per lb., \$1.00, postpaid.

Essex Hybrid—The large fruits are broad, round and slightly flattened at the ends, with a large nub or "Turk's Cap," at the blossom end. Skin deep, creamy-orange. Per pkt., 5c; oz., 10c; $\frac{1}{4}$ lb., 30c; per lb., \$1.00, postpaid.



MAMMOTH CHILI

Spinach

By express, deduct 10 cents per pound.

Should be planted in very rich ground, the richer the better. Sow in drills twelve to eighteen inches apart, and begin thinning out the plants when the leaves are an inch wide. All should be cut before hot weather, or they will be tough and stringy. For early spring use sow early in autumn and protect the plants with a light covering of leaves or straw, or plant as soon as the land can be worked in the spring. Under favorable conditions, the leaves may be large enough for eating in eight weeks.

Victoria—The foliage is heavy, the broad, dark-green leaves being of the true Savoy appearance, and of the finest quality. It remains in prime condition from two to three weeks after nearly all other varieties have run to seed. Per pkt., 5c; oz., 10c; $\frac{1}{4}$ lb., 15c; per lb., 40c, postpaid.

Thick-Leaved Round—Produces large, thick dark-green leaves, somewhat crumpled. Per pkt., 5c; oz., 10c; $\frac{1}{4}$ lb., 15c; per lb., 35c.

New Zealand—(*Tetragonia expansa*).—The stems and leaves are soft, thick, fleshy and of a crystalline appearance. Started early in the spring, the plants will resist heat and make a strong growth during the summer. Per pkt., 5c; oz., 10c; $\frac{1}{4}$ lb., 30c; per lb., \$1.00.



Long-Standing—Leaves large, thick, fleshy and crumpled. Per pkt., 5c; oz., 10c; $\frac{1}{4}$ lb., 15c; per lb., 35c.

Long-Standing Prickly—Matures a little later than the round-leaved sorts, but furnishes a large quantity of thick leaves of excellent flavor. Per pkt., 5c; oz., 10c; $\frac{1}{4}$ lb., 15c; per lb., 40c.

Norfolk Savoy-Leaved—(Blossomsdale).—The leaves are numerous, curled and wrinkled. Per pkt., 5c; oz., 10c; $\frac{1}{4}$ lb., 15c; per lb., 40c, postpaid.

Prickly, or Winter—For fall sowing. Per pkt., 5c; oz., 10c; $\frac{1}{4}$ lb., 15c; per lb., 35c.

Tobacco

Culture—The seed should be sown as early as possible after danger of frost is over. A good plan is to burn a quantity of brush and rubbish in the spring on the ground intended for the seed bed; then dig and thoroughly pulverize the earth and mix with the ashes, after which the seed may be sown and covered very lightly. When the plants are about six inches high, transplant into rows four or five feet apart each way; cultivate thoroughly with plow and hoe.

Connecticut Seed Leaf—An old, well-known variety. Per pkt., 5c; oz., 25c; $\frac{1}{4}$ lb., 75c; per lb., \$2.25, postpaid.

Lancaster Co. Broadleaf—More largely grown than any other in Lancaster County. Per pkt., 5c; oz., 25c; per lb., \$2.25.

Havana—Grown from seed imported from Vuelta de Abajo. Per pkt., 10c; oz., 40c.

Improved White Burley—This strain is much superior to the regular White Burley. Per pkt., 10c; oz., 40c; $\frac{1}{4}$ lb., \$1.10; lb., \$4.00.

Our space does not permit giving description of the following standard varieties of Tobacco:

Bonanza—A White Burley cross on Yellow Oronoko, possessing the qualities of both parents blended. Per pkt., 10c; oz., 30c; $\frac{1}{4}$ lb., 85c; per lb., \$3.00.

General Grant—It produces leaves forty-four inches in length, and matures as far North as Duluth, Minnesota. Per pkt., 10c; oz., 40c; $\frac{1}{4}$ lb., \$1.10; per lb., \$4.00.

Sterling—One of the earliest to ripen and one of the best for all purposes. Per pkt., 10c; oz., 35c; $\frac{1}{4}$ lb., \$1.00; per lb., \$3.50.

SMALL FRUITED TOMATOES

The fruit of these are largely used for making fancy pickles, preserves, etc. The plants are extremely productive.

Yellow Plum—The fruits average two inches in length and one inch in diameter, of a bright lemon-yellow; are solid, fleshy, and of excellent flavor. Per pkt., 5c; oz., 30c; $\frac{1}{4}$ lb., 85c; per lb., \$3.00.

Yellow Pear—Similar to the Yellow Plum, but the fruits have a slim neck or distinct pear shape. Per pkt., 10c; oz., 30c; $\frac{1}{4}$ lb., 85c; per lb., \$3.00.

Peach—Fruits one and a half inches in diameter. The skin is covered with a slight bloom of pubescence, as in a peach, and of beautiful pinkish coloring. Per pkt., 10c; oz., 30c; $\frac{1}{4}$ lb., 85c; per lb., \$3.00.

Burbank Preserving—The plants are of dwarf stocky growth, with dark-green potato-leaf foliage. The small round scarlet tomatoes, borne in clusters, measure only three-quarters of an inch in diameter; of an unusually rich

sweet flavor. Per pkt., 10c; oz., 30c; $\frac{1}{4}$ lb., 85c; per lb., \$3.00.

Yellow Cherry—The small yellow fruits, borne in clusters, average half an inch in diameter. Per pkt., 5c; oz., 30c; $\frac{1}{4}$ lb., 85c; per lb., \$3.00.

Red Cherry—Little fruits of a bright scarlet color. Per pkt., 5c; oz., 30c; $\frac{1}{4}$ lb., 85c; per lb., \$3.00.

Red Pear-Shaped—This is a leading favorite for preserves and also to make "tomato figs." The fruit is bright red, of true pear shape, and of rich distinct flavor. The larger plum-shaped red tomato, often sold under the same name, is not nearly equal to the true variety. Per pkt., 10c; oz., 30c; $\frac{1}{4}$ lb., 85c; per lb., \$3.00.

Strawberry, or Husk Tomato—Plants of low-spreading growth and immensely productive. The small yellow fruits are each enclosed in a husk. Of very sweet flavor, highly esteemed for preserving or making pies. They are also excellent to eat raw as fruit. Per pkt., 10c; oz., 30c; $\frac{1}{4}$ lb., 85c; per lb., \$3.00.

Tomato

Culture—Tomatoes do best on light, warm, not over rich soil, and success depends upon securing a rapid, vigorous and unchecked growth during the early part of the season. Sow in hotbeds from six to eight weeks before they can be set out of doors, which is when danger from frost is past; when the plants have four leaves transplant into shallow boxes or cold frames, setting them four or five inches apart; give plenty of air, and endeavor to secure a vigorous but steady and healthy growth, so that at the time of setting in the open ground they will be strong and stocky. Even a slight check while the plants are small will materially diminish their productiveness. Set out of doors as soon as danger from frost is over, but before doing so harden off the plants by gradually exposing them to the night air, and by the withdrawal of water until the wood becomes hard and the leaves thick and of a dark-green color. Transplant carefully and cultivate well as long as the vines will permit.

To insure best results in respect to early ripening, as well as the amount and perfection of fruit, it is advisable to train up and trim the vines, especially if the patch is rather small. When the plants have been properly started and are six to ten inches high, they will begin to throw out branches. Select one of the largest and most vigorous of these and pinch off all others except this one and the main stem. Care must be exercised not to pinch off the fruiting branches, which, as they appear, can be distinguished by the buds that are formed very early. In a short time these two remaining branches will become equally vigorous, and as ordinary varieties will grow four to six feet high during the season, they should be securely tied at intervals of about ten inches to a long stake, preferably two inches square, which has been securely set in near the root of the vine. Fruit will set to almost any height desired if all side branches are kept trimmed off.

By such a method of training and trimming the fruits are kept clear from the ground, and with free access to sunlight they ripen much earlier: the vitality, otherwise exhausted in superfluous branches and leaves, is utilized in forming fruits of largest size, greatest perfection of shape and best quality.

Chalk's Early Jewel

Chalk's Early Jewel—The largest, smoothest and finest-flavored extra early bright red tomato! Within a week to ten days as early as Spark's Earliana, it is even a heavier cropper, with tomatoes of larger size and sweeter flavor—produced continuously throughout the season. Of compact growth, the plants are fairly loaded with fruit. The tomatoes are uniformly of good size—seventy-five will fill five-eighths bushel basket. The large, handsome fruits are very solid and deep through, being almost round, or ball-shaped. Color brightest scarlet, ripening right up to the stem without any cracks or green core. The thick flesh is very solid, with comparatively few seeds, and of fine, sweet flavor; skin thin, but sufficiently strong to make it a good shipper. Per pkt., 5c; ½ oz., 25c; per oz., 40c; ¼ lb., \$1.00; per lb., \$4.00.

Spark's Earliana

Spark's Earliana—The plants are compact in growth, with short, close-jointed branches, setting fruits very freely in the center. An entire plant may be covered with an ordinary bushel corn basket—yet so freely are the fruits set that each plant will produce a five-eighths bushel basket of tomatoes during the season of about four weeks, which covers the bearing period of the early plants.

The tomatoes are quite uniform in size and of smooth regular form, averaging three inches in diameter and from two to two and a half inches in depth; they are fleshy, solid and excellent for shipping purposes. Choice seed of this strain is extra selected and far superior to the stock usually sold. Per pkt., 5c; ½ oz., 25c; oz., 40c; 2 oz., 70c; ¼ lb., \$1.10; lb., \$4.00.

Quarter Century

Burpee's New Early Dwarf "Quarter Century"—Earliest of all Dwarf-Growing Red Tomatoes—owing to its compact erect habit, the plants can be set quite closely together. The fruits are larger and superior in flavor. Well-grown fruits measure three inches across and two and a half inches in depth. They are always smooth and free from cracks—interior very solid and meaty. The tomatoes are of an intense bright red; they fully retain color and flavor when canned or prepared for the table. We offer only the choicest seed grown on Burpee's Fordhook Farms. Per pkt., 10c; ½ oz., 25c; oz., 40c; 2 oz., 70c; ¼ lb., \$1.10; per lb., \$4.00.

Beauty

Beauty—A rather early, tall variety; very prolific, with good-sized smooth fruit of a purplish-carmine color. Pkt., 5c; oz., 25c; ¼ lb., 75c; lb., \$2.25.

Bonny Best

Bonny Best—An early, scarlet-fruited variety which has proven a success all over the country. It is from ten days to two weeks earlier than Chalk's Early Jewel, which it otherwise resembles. It is smooth, very even in size, very solid, and also very prolific. It is one of the best house-garden, canning and shipping Tomatoes in existence. Pkt., 10c; oz., 50c; ¼ lb., \$1.50; lb., \$5.00.

Matchless

Matchless—A very popular tomato in the East. Fruit large, very smooth and symmetrical, ripening well to the stem. Flesh rich, bright red color and of fine quality, though softer than that of either improved Trophy or Stone. Per pkt., 5c; oz., 25c; 2 oz., 40c; ¼ lb., 75c; lb., \$2.50.

Improved Trophy

Improved Trophy—By careful breeding and selection, there has been produced a strain which compares favorably with any in smoothness and regularity of the fruit. Its large, strong growing, vigorous and exceptionally productive vines, large, very solid, smooth, fine flavored and beautiful, deep, rich red fruit will satisfy the most exacting. Pkt., 5c; oz., 25c; 2 oz., 40c; ¼ lb., 75c; lb., \$2.50.

Stone

Stone—The best main crop variety for all purposes and largely used for canning. Vine tall and prolific. Fruit smooth, large and uniform. Color bright scarlet. Pkt., 5c; oz., 25c; ¼ lb., 75c; lb., \$2.25.

Favorite

Favorite—A tall variety, bearing globe-shaped, scarlet fruit. The fruit is smooth and uniform, and well ripened to the stem. Pkt., 5c; oz., 25c; ¼ lb., 75c; lb., \$2.25.



The value of Turnips and Ruta-bagas for feeding stock in fall and winter is not fully appreciated, as they are much liked by all kinds of stock, and serve to keep them in good condition. We earnestly recommend that farmers increase their sowings largely, for we are sure the crop will prove remunerative.

This wholesome and agreeable vegetable is most easily affected in its form and flavor by soil, climate and mode of culture. There are a great many varieties, but our list comprises the best for the garden or farm.

Sow in drills about two feet apart and half an inch deep, or sow broadcast, but in either case be sure to have the ground rich and freshly stirred. Thin early and keep free from weeds, so that the young plants will not be checked in growth. Any over-crowding will result in rough and poorly-flavored roots. It is important to get the spring and summer crop started very early, so that the turnips may have time to grow to sufficient size before hot weather causes them to become tough and bitter.

In Middle and Western States sow for fall and main crop middle of July to last of August, and in the manner given for spring sowing. In the field turnips are often sown broadcast, though in most cases better results are obtained by drill culture.

For winter keeping, store the turnips in a cool cellar and cover with sand or turf to keep them fresh. Another method is to put them in a pit dug in dry soil, where there will be no danger of water standing, and to cover with straw overlaid with earth sufficiently deep to keep out frost. Thus protected, turnips will keep well till spring.

Extra Early Purple Top and Extra Early White Milan Turnips are the earliest of all, being of very quick growth and fine table quality; they are both flat strap-leaved varieties. The Scarlet Kashmyr is almost as early as the Milan; flat root and small strap-leaf; the smooth skin is a deep purplish scarlet throughout.

The popular Purple-Top-Strap-Leaved (see illustration) and Early White Flat Dutch Strap-Leaved are standard early flat varieties; they are only three days to a week later than the Milan, and keep longer in fine condition.

White Egg is an oval-shaped early variety, with thin white skin and fine table quality. The Red-Top White Globe is of large, round form, reddish purple in the upper half and pure white in the lower; it is rather late, grows to large size, and is fine for either table use or stock feeding. White Globe Strap-Leaved is similar to the preceding, but the large turnips have pure white skin. Pomeranian White Globe is one of the largest globe-shaped sorts, and is grown extensively for winter use and stock feeding.

All of the above are white-fleshed. Of richly colored yellow-fleshed turnips the Golden Ball is a small round turnip of fine table quality; Yellow Aberdeen, a large ball-shaped turnip, also of fine quality, while the large Yellow, or Amber Globe, grown chiefly for stock feeding, attains a large size, and is an excellent keeper. The new Petrowski is an extra flat turnip, with deep yellow flesh, of finest quality.

Early White Flat Dutch Strap-Leaved—popular early. Per oz., 10c; $\frac{1}{4}$ lb., 15c; per lb., 50c.

Early Red, or Purple-Top Strap-Leaved—Standard early. Per oz., 10c; $\frac{1}{4}$ lb., 15c; per lb., 50c.

Extra Early Purple-Top Milan—The earliest in cultivation. Per oz., 10c; $\frac{1}{4}$ lb., 20c; per lb., 60c.

Extra Early White Milan—The earliest flat white; extra fine. Per oz., 10c; $\frac{1}{4}$ lb., 30c; per lb., \$1.00.

Red-Top White Globe—A fine globe-shaped table turnip. Per oz., 10c; $\frac{1}{4}$ lb., 20c; per lb., 60c.

White Globe Strap-Leaved—White, globe-shaped; early. Per oz., 10c; $\frac{1}{4}$ lb., 20c; per lb., 60c.

White Egg—Of handsome oval form, with thin white skin. Per oz., 10c; $\frac{1}{4}$ lb., 20c; per lb., 60c.

Sweet German, or Long White French—Flesh hard and crisp. Per oz., 10c; $\frac{1}{4}$ lb., 20c; per lb., 60c.

Long White, or Cowhorn—Pure white, except at top. Per oz., 10c; $\frac{1}{4}$ lb., 20c; per lb., 50c.

Pomeranian White Globe—Both for feeding and table; large. Per oz., 10c; $\frac{1}{4}$ lb., 20c; per lb., 60c.

If ordered by express, deduct 10 cents per pound.

YELLOW-FLESHED VARIETIES.

Petrowski—Extra early flat; sweetest, fine-grained. Per oz., 15c; $\frac{1}{4}$ lb., 40c.

Large Yellow, or Amber Globe—Fine for table and feeding. Per oz., 10c; $\frac{1}{4}$ lb., 20c; per lb., 60c.

Yellow Aberdeen—For both table and stock feeding. Per oz., 10c; $\frac{1}{4}$ lb., 20c; per lb., 60c.

Golden Ball, or Orange Jelly—Very tender and of fine flavor. Per oz., 10c; $\frac{1}{4}$ lb., 20c; per lb., 60c.

EACH VARIETY 5c. PER PKT.

WRITE FOR SPECIAL PRICES WHEN WANTED IN QUANTITIES

Rutabagas or Swedes

Culture of Ruta Bagas—Sow the seed from about the middle of June to the middle of July. Ruta Bagas require ground enriched with well-rotted manure, and should be sown in drills about two and one-half feet apart and the young plants thinned eight to twelve inches apart in the row. Keep free from weeds by frequent cultivation, and when the roots are full grown and before hard freezing weather, pull them, cut off the tops and store in a root cellar or pit. Ruta Bagas are sometimes sown broadcast and left to take their chances with the weeds and bugs. So treated, the crop is seldom a success, though occasionally on new clearings, free from weed seed, fair results are obtained.

Monarch, or Tankard—This is a yellow fleshed sort, having very large tankard-shaped roots, with relatively small necks, and tops. Color purplish-crimson above ground, yellow below; flesh very solid, fine-grained and of the best flavor. Pkt., 5c; oz., 10c; 2 ozs., 15c; $\frac{1}{4}$ lb., 20c; lb., 60c.

Butzer's Best—This is a strain of Purple-Top Yellow Ruta Baga of American origin, selected to a smaller top and a much shorter neck than is usually found, while the roots grow to a large size, and are of the finest quality and excellent for table use and stock feeding. We consider this one of the most desirable kinds on our list. Pkt., 5c; oz., 10c; 2 ozs., 15c; $\frac{1}{4}$ lb., 20c; lb., 60c.

Burpee's Improved Purple-Top Yellow—A fine strain. Per oz., 10c; $\frac{1}{4}$ lb., 20c; per lb., 60c.

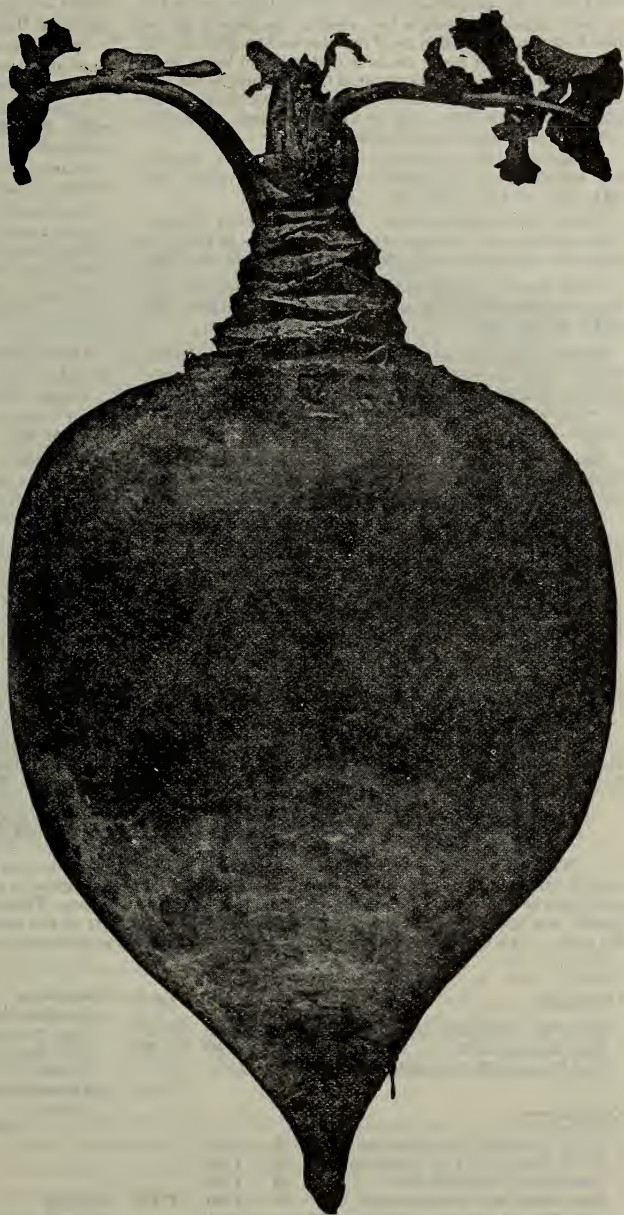
New Neckless—Globe-shaped; yellow flesh; crop failed.

Imperial Hardy—Purple top; smooth round roots; yellow flesh. Per oz., 10c; $\frac{1}{4}$ lb., 20c; per lb., 60c.

Large White—Large size, white skin sweet, white flesh. Per oz., 10c; $\frac{1}{4}$ lb., 20c; per lb., 60c.

Each variety, 5c per pkt.

If ordered by express, deduct 10c per lb.



Golden Neckless.—The roots attain a large size, are almost globular, being slightly oblong; the flesh is yellow, solid, and of finest quality. It bulbs uniformly without any objectionable neck, so that when harvesting for Winter the roots are not so liable to bleed and therefore keep much better right into Spring. Per pkt., 5c; oz., 10c; $\frac{1}{4}$ lb., 25c; per lb., 75c.

White-Fleshed Neckless.—This choice variety is similar in all respects to the *Golden Neckless*, but both skin and flesh are white. It forms perfectly smooth, slightly elongated, globe-shaped roots of great weight, very solid and choice quality both for table use and cattle feeding. A splendid keeper. Per Pkt., 5c; oz., 10c; $\frac{1}{4}$ lb., 25c; per lb., 75c.

WRITE FOR SPECIAL QUOTATIONS ON LARGE QUANTITIES

HERBS—SWEET, MEDICINAL AND POT HERBS, FROM SEED

To preserve varieties of which the leaves and stems are used, the stems should be cut from the plants just before the blossom appears (leaving a few joints at the base to sprout into fresh growth), tied in small bunches and hung up to dry. Where wanted for home use it is preferable to leave them hanging in a cool loft or garret until they are needed for use. The varieties marked with an asterisk (*) are hardy perennials, living over from year to year, and need replanting when the old plants become exhausted.

Anise—(*Pimpinella anism*). Used for cordials, garnishing, and flavoring; the seeds have an aromatic taste. Per pkt., 5c; oz., 10c; $\frac{1}{4}$ lb., 25c.

Balm—(*Melissa officinalis*). The leaves have a fragrant odor, and are used for making a pleasant beverage known as balm wine, also balm tea, for fevers. Per pkt., 5c; oz., 25c.

Basil Sweet—(*Ocymum basilicum*). The leaves are used for flavoring soups, stews and highly seasoned dishes. Per pkt., 5c; oz., 20c.

Bene—(*Sesamum orientale*). Too tender for the North, but much used in the South. The seeds furnish an oil used for softening and whitening the skin. The leaves immersed in water make a drink beneficial for diarrhoea. Per pkt., 5c; oz., 15c.

Borage—(*Borago officinalis*). Leaves are used for flavoring, and flowers furnish bee pasture. Per pkt., 5c; oz., 15c; $\frac{1}{4}$ lb., 40c; per lb., \$1.25, postpaid.

***Caraway**—(*Carum carni*). Grown for the seeds which are used for flavoring bread, pastry, etc. Per pkt., 5c; oz., 10c; $\frac{1}{4}$ lb., 25c.

***Catnip, or Catmint**—(*Nepeta cataria*). The leaves are used for seasoning. It makes also an excellent bee pasture. Per pkt., 10c; oz., 30c; $\frac{1}{4}$ lb., 85c.

Coriander—(*Coriandrum sativum*). The seeds are used in manufacture of liquors and confectionery. Per pkt., 5c; oz., 10c; $\frac{1}{4}$ lb., 25c; per lb., 75c, postpaid.

Dill—(*Anethum graveolens*). The seeds have an aromatic odor and warm pungent taste. They are used as a condiment, and also for pickling with cucumbers. Per pkt., 5c; oz., 10c; $\frac{1}{4}$ lb., 25c; per lb., 75c, postpaid.

***Fennel, Sweet**—(*Anethum foeniculum*). The leaves boiled are used in sauces. Per pkt., 5c; oz., 10c; $\frac{1}{4}$ lb., 25c; per lb., 75c, postpaid.

***Horehound**—(*Marrubium vulgare*). The leaves are used for seasoning and also in the manufacture of the popular cough remedy. Per pkt., 5c; oz., 20c; $\frac{1}{4}$ lb., 60c.

***Lavender**—(*Lavendula spica*). The variety generally sold. Per pkt., 5c; oz., 15c; $\frac{1}{4}$ lb., 40c; per lb., \$1.50, postpaid.

***Lavender**—(*Lavendula vera*). The true Lavender. Per pkt., 10c; oz., 35c; $\frac{1}{4}$ lb., \$1.00; per lb., \$3.50.

Marjoram, Sweet—(*Origanum marjoram*). The leaves and the ends of the shoots are esteemed for seasoning in summer, and also dried for winter use. Per pkt., 5c; oz., 15c; $\frac{1}{4}$ lb., 40c; per lb., \$1.50.

***Rosemary**—(*Rosmarinus officinalis*). The aromatic leaves are used for seasoning. Per pkt., 5c; oz., 45c; $\frac{1}{4}$ lb., \$1.25.

***Rue**—(*Ruta graveolens*). For medicinal purposes, good for fowls. Per pkt., 5c; oz., 20c.

***Sage**—(*Salvia officinalis*). The most extensively used of all herbs for seasoning and dressing, indispensable. Per pkt., 5c; oz., 20c; $\frac{1}{4}$ lb., 60c; per lb., \$2.00.

Summer Savory—(*Satureia hortensis*). The leaves and flowers are used extensively for flavoring, particularly in soups and dressings. Per pkt., 5c; oz., 15c; $\frac{1}{4}$ lb., 40c; per lb., \$1.25.

***Winter Savory** (*Saturela montana*). The leaves are used for flavoring. Per pkt., 5c; oz., 20c; $\frac{1}{4}$ lb., 60c; per lb., \$2.00.

***Tansy**—(*Tanacetum vulgare*). Per pkt., 5c; oz., 30c.

***Tagetes Lucida**—Considered an excellent substitute for the True Tarragon, which does not seed. Per pkt., 10c; oz., 45c.

***Thyme**—(*Thymus vulgaris*). The leaves are used for seasoning; a tea is also made for nervous headache. Per pkt., 10c; oz., 25c; $\frac{1}{4}$ lb., 75c.

***Wormwood**—(*Artemisia asinuthum*). Used medicinally, and is beneficial for poultry; should be planted in poultry yards. Per pkt., 5c; oz., 20c; $\frac{1}{4}$ lb., 60c.

VEGETABLE PLANTS

We have grown for us large quantities of choice vegetable plants, and can supply all of the varieties listed below, in their proper season, in most any quantity. We can supply all vegetable plants in two grades — plants direct from the seed beds and those that have been transplanted into shallow boxes. Transplanted plants are much stronger and better rooted, and are well worth the price, especially in the early part of the season. We can supply most any of the leading sorts. Tell us our choice of varieties, and we will send it or give good substitute. No plants sent C. O. D.

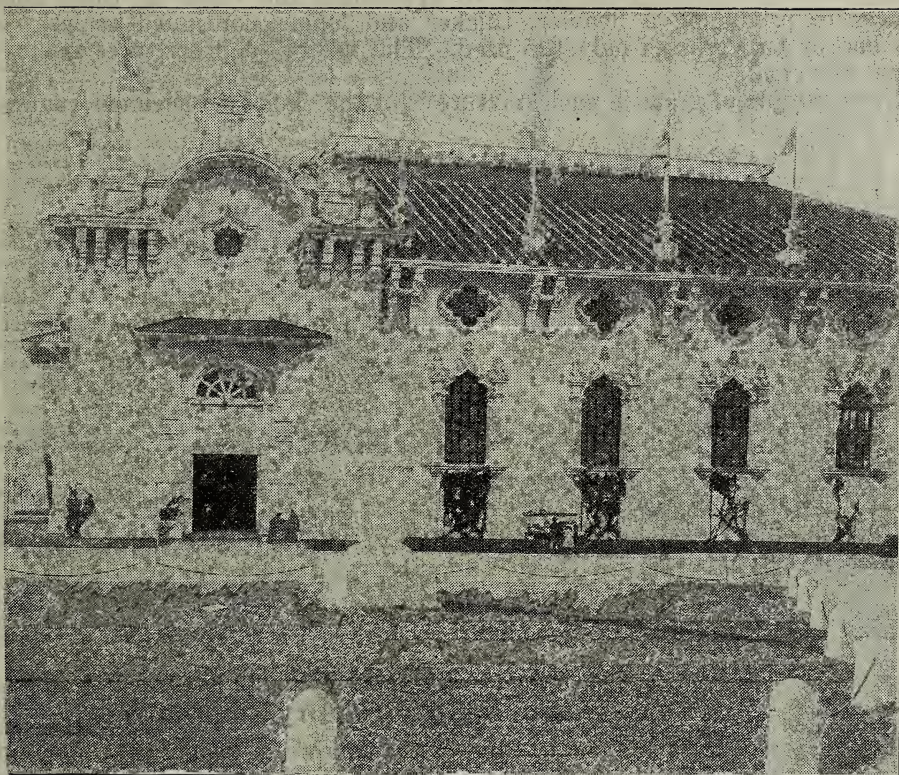
	Postpaid By Express.				Postpaid By Express.		
	Dozen	100	1000		Dozen	100	1000
Cabbage				Tomatoes.			
Early or late kinds, transplanted.....	\$0.20	\$1.00	\$5.00	Leading kinds, transplanted.....	\$0.35	\$1.25	
Not transplanted.....		.50	3.00	Not transplanted.....		.75	
Add 25c per 100 for Cabbage Plants by mail.				Add 40c per 100 for Tomato Plants by mail.			
Cauliflower.				Special — Pot-grown tomato plants; large and strong; 10c each; \$1.00 doz., not postpaid; must go by express.			
Early Snowball, transplanted....	.25	1.25		MISCELLANEOUS PLANTS.			
Early Snowball, not transplanted....	.20	1.00		All Transplanted.			
Late kinds, transplanted.....	.20	1.00		Postpaid By Express.			
Late kinds, not transplanted....	.25	1.00	7.50	Dozen 100 1000			
Add 25c per 100 for Cauliflower Plants by mail.				Broccoli.....	\$0.25	\$1.00	\$7.00
Celery.				Brussels Sprouts.....	.25	.75	6.00
Leading kinds, transplanted.....	.25	1.00	7.50	Celeriac.....	.25	.75	6.00
Not transplanted.....	.75	6.00		Egg Plant.....	.30	1.00	7.00
Add 25c per 100 for Celery Plants by mail.				Pepper.....	.30	1.00	7.00
				Sweet Potato Plants.....	.30	1.00	7.00
				Tobacco.....	.30	1.00	7.00
				Add 25c per 100 for above plants by mail.			
				Chives [Schnittlauch].....			Per bunch 25c

NOTE.—Special Low Prices in Quantities.

LAWN GRASS

“BUTZER’S BEST”

LAWN GRASS



BUTZER’S BEST

LAWN GRASS—“BUTZER’S BEST”

This is the very best Lawn Grass Seed on the market for the Pacific Northwest. It is composed of the very best seeds of the choicest fine-bladed grasses, to which is added a suitable quantity of white clover. A great many of our most beautiful lawns in this city are the result of this mixture. The most prominent places that I supplied with this same mixture are: The Oaks, the City Parks, of which there are a number, St. Vincent Hospital, Good Samaritan Hospital. Twenty-five of our school grounds, about ninety per cent of the landscape gardeners of this city, will have no other, which should speak for itself. There is a reason — Nuf Sed. Price, 40c per lb., postpaid. Write for special prices on large quantities, and all other information you may want.

Hints on Lawn Making.—Lawn grass seed may be sown the year round in Oregon. In making a new lawn the soil should be carefully cultivated to a depth of one foot, and prepared to the desired level, and well rolled, after which a light raking will prepare it for the seed. If the soil is poor it should be enriched with well rotted, sifted stable manure, or some good commercial fertilizer. Sow the seed carefully and evenly, using one pound to cover an area of 250 square feet; rake in well and roll.

Fertilizing the Lawn.—To keep up the beauty of a lawn, it will be necessary to feed the grass well. You cannot expect it to retain that depth and richness of texture and color which characterizes it while young, after the elements of plant food have been exhausted. Lawn Fertilizer, \$2.50 per 100 lbs; Bone Meal, \$2.00 per 100 lbs.

SEEDS-- THE KIND THAT GROW
YOU CAN'T KEEP THEM
IN THE GROUND

Butzer's Hay and Pasture Special Grass Mixtures

Our customers have been quick to appreciate the value of these special mixtures in producing a heavier, thicker and longer continued growth than when one or two grasses only are used. The use of such mixtures is sure to become universal.

Every sample of grass in each mixture is of the choicest re-cleaned quality.

MEADOW MIXTURES

No. 1. On Good Land, Neither Too Dry Nor Too Wet.

This mixture is composed of the following grasses and clovers, blended in the proper proportions:

Fancy Red Top, Tall Meadow Oat Grass, Sheep's Fescue, Red Clover, Meadow Foxtail, Orchard Grass, Perennial Rye Grass, Alsike Clover, Hard Fescue, Timothy.

Write for Price.

MEADOW MIXTURES

No. 2. For High and Dry Land.

This mixture is composed of the following grasses and clovers:

Fancy Red Top, Orchard Grass, Timothy, Tall Meadow Oat Grass, Hard Fescue, Red Clover, Crested Dog's Tail, Sheep's Fescue, White Clover.

Write for Price.

PASTURE MIXTURE

No. 3. On Good Land, Neither Too Dry Nor Too Wet.

This mixture contains some of each of the following, properly proportioned:

Tall Meadow Oat Grass, Sheep's Fescue, Meadow Foxtail, White Clover, Red Top, Hard Fescue, Kentucky Bluegrass, Red Clover, Orchard Grass, Perennial Rye Grass, Timothy.

Write for Price.

No. 4. On Dry Land.

This mixture is composed of the following:

Creeping Bent Grass, Orchard Grass, Sheep's Fescue, Tall Meadow Oat Grass, Red Clover, Timothy, Kentucky Bluegrass, White Clover, Perennial Rye Grass, Hard Fescue.

Write for Price.

No. 5. On Wet Land.

This mixture contains:

Orchard Grass, Perennial Rye Grass, White Clover, Fancy Red Top, Kentucky Bluegrass, Meadow Foxtail, Meadow Fescue, Alsike Clover, Timothy.

Write for Prices.

The Amount of Seed necessary to sow an acre largely depends on the quality of the land; the poorer the soil the larger the quantity required. A fair average is from 25 to 30 pounds to the acre. The thicker seeds are sown, the sooner will a fine, close turf be obtained.

Grass Seeds

All of these articles are governed in value by regular market quotations, and their values are subject to frequent changes, quite as much so as grain; and for this reason it is impossible for me to quote prices here which will hold good for the season. But would be pleased to give quotations on any seeds you may need.

Creeping Bent—(*Agrostis stolonifera*). A very hardy grass, especially adapted to moist lands and those which are occasionally overflowed. Its peculiar habit of branching underneath the surface enables it to resist to the greatest extent tramping and pasturage; about 20 lbs. to the bushel. Write for prices.

Rhode Island Bent Grass—(*Agrostis canina*). This somewhat resembles Red Top. It makes a close sod, and is valuable for permanent pastures and meadows. Write for price.

Red Top, or Herd Grass—(*Agrostis vulgaris*). It is a most valuable addition to sow with timothy and clover to form a close sward for pasturage; about 32 lbs. to the bushel; $\frac{1}{2}$ bushel to the acre; for lawns, 3 bushels to the acre. Write for price.

Crested Dog Tail—(*Cynodurus cristatus*). A valuable addition for lawn grasses which require close cutting and an adaptability to resist tramping, as in golf links, etc.; about 21 lbs. to the bushel. Write for price.

Hard Fescue—(*Festuca duriuscula*). An excellent pasture grass, the tender blades seeding well in dry or shady locations; about 12 lbs. to the bushel. Write for price.

Orchard Grass—(*Dactylis glomerata*). This is one of the most desirable pasture grasses for stock, and also for producing large crops of hay. It succeeds well in quite shady places, hence the name Orchard Grass. Cholcest re-cleaned seed; 14 lbs. to the bushel. Write for price.

Timothy—(*Phleum pratense*). Of the easiest in cultivation and with us is usually sown in connection with winter grain in the fall, to which a seeding of clover is added early in the spring, 45 lbs. to the bushel. Write for price.

Fancy Kentucky Blue—(*Poa pratensis*). This is pre-eminently a pasture grass, forming a close, fine sward. It thrives best in dry, well-drained or limestone soils; 14 lbs. to the bushel; $2\frac{1}{2}$ bushels to the acre. Write for price.

English Rye Grass—(*Lolium perenne*). This makes a quick growth very early in spring, and is adapted for cool, moist locations; recommended for fall seeding on Bermuda-grass lawns in the South, giving them a bright green appearance all winter; 24 lbs. to the bushel. Write for price.

Italian Rye—(*Lolium Italicum*). This is distinct from the preceding, being of much larger and stronger growth, with large, broad, glossy-green blades. It succeeds best in moist, fertile soils; about 20 lbs. to the bushel. Write for price.

Sweet Vernal (True Perennial)—(*Anthoxanthum odoratum*). This is frequently used to mix with other grasses for pastures and lawns. Write for price.

Sheep's Fescue—(*Festuca ovina*). Slender blades growing in close, compact clumps and from six to ten inches in height; about 12 lbs. to the bushel. Write for price.

Meadow Fescue—(*Festuca pratensis*). An excellent pasture or lawn grass, relished by cattle; about 22 lbs. to the bushel. Write for price.

Tall Meadow Oat—(*Avena elatior*). A very valuable pasture grass on account of its early and luxuriant growth. It is especially adapted for rather dry, light soils; about 10 lbs. to the bushel; 4 to 5 bushels to the acre. Write for price.

Meadow Foxtail—(*Alopecurus pratensis*). Closely resembles timothy in growth, but has a soft, feathery head. It is a valuable pasture grass by reason of its rapid growth; about 7 lbs. to the bushel; 3 bushels to the acre.



Awnless Brome Grass—(*Bromus inermis*). This is a quick-growing grass, which has proven to be of great value for light or poor dry soils. It grows very quickly and makes a large crop of hay the first season if seeded early in the spring. It has been used successfully on hillsides, embankments and dry lands to prevent washing from heavy rains, as it grows quickly, covering the entire surface of the ground. The stalks are numerous and slender, thickly set with long soft blades or leaves, which make excellent hay. This grass when once established maintains a close, thick sod and produces large crops for hay and pasturage if kept properly fertilized. The seed weighs fourteen pounds to the measured bushel, and two to three bushels should be sown to an acre. Write for price.

Rough-Stalked Meadow Grass—(*Poa trivialis*). A valuable grass for moist soils or meadows, making excellent pasture or very nutritious hay; about 14 lbs. to the bushel, 35 lbs. to the acre. Write for price.

WRITE FOR PRICES

Clovers

Alfalfa, or Lucerne Clover—(*Medicago sativa*.) This wonderfully productive and enduring clover-like plant has been grown in great areas in the Western States for a great many years, both for hay and pasturage. Its value and adaptability for the Eastern and Northern States have been recognized only recently, and its planting in these sections is still in the experimental stage; the conditions requisite for success are not generally understood. It is slower in obtaining a start than common red clover, but when once established in dry or well-drained soil the roots penetrate the subsoil very deeply and the plants continue to produce large crops for many years—so that the thorough preparation of the soil and the care of the young plants the first season is not unduly expensive when it is considered that a well-cared-for field of Alfalfa will continue to produce heavy and continuous crops of hay and green forage for such a long time. In many cases fields which have been planted fifteen to twenty years are still yielding fine crops.

Like all clovers, the plant draws nitrogen largely from the air, and as the roots penetrate very deeply it is regarded as one of the most valuable plants that can be grown to enrich the fertility of the surface soil. In seeding Alfalfa, well-drained land which will be free from standing water or excessive moisture during the winter months should be chosen. The ground should be plowed and the surface made as fine as possible before sowing the seed. The seed may be sown early in the spring, or in light soils early in the fall, and in clean land can be sown broadcast, using 20 to 30 pounds per acre; but if the land is foul or weedy, it is best to sow the seed in rows or drills about 15 to 18 inches apart, so that the young plants can be cultivated and kept free from weeds until well established in growth, when additional seed is sown between the rows.

To promote growth and insure a long, continuance of the stand, it is necessary that the tops or stems be cut every time they come into flower, and they should not be allowed to produce any seed. The growth is frequently quite small the first spring, but the tops must be cut when coming into flower, even if they are only four to six inches in height. It will be found that repeated clippings with the mowing machine or scythe the first year it is planted is the cheapest and most satisfactory way to keep the crop from being smothered by weeds, as well as to promote the growth. If the first cuttings are not heavy enough to cure for hay, they may be left on the ground, and will act as a mulch for the young plants. When large enough to cut for hay, it should be mown early in the morning, and as soon as cutting is wilted it should be gathered into wind rows or cocks to dry slowly. This slow-curing method will prevent its becoming black or the leaves dropping from the stalks. Write for price.

BOKHARA or Sweet Clover. Grows 3 to 5 feet high, covered with small, white flowers of great fragrance. Very valuable for bee pasture. Sow 10 pounds to the acre.

Burr Clover (*Medicago Dentaculata*.) The native forage plant of California. Of the easiest culture, growing all winter and well into summer. We offer only "Hulled Seed," which is much easier to sow than in a burr. Sow from August to October, using 15 to 20 pounds of hulled seed per acre.

Alsike, or Hybrid Clover—(*Trifolium hybridum*.) This variety, which is frequently called Swedish Clover, is in our estimation the hardiest, most enduring and most valuable for the production of either pure clover hay or the finest grades of mixed hay in the cooler Northern States. The stalks are taller and more slender than those of common red clover, and it also blossoms later, so that when sown in mixture with timothy it is ready to cut at the same time, while the blossoms of red clover have blackened before the tim-

othy has reached its largest growth. The Alsike Clover, being so much harder than the common red, will endure longer in the sod of mixed grass, as the red clover usually disappears in such sods after the first summer.

Seed may be sown broadcast on winter grain early in the spring, or on freshly prepared ground either in the spring or early fall—the latter being preferable for light, sandy soils, and warm locations. When sown alone, 10 to 15 pounds of seed should be sown to each acre of land, but when seeded along with timothy or other fine grasses, 6 to 10 pounds per acre will be sufficient. Write for prices.

Red Clover—(*Trifolium pratense*.) The standard clover for all purposes, either pasture, hay, or for improving and enriching the soil. It is hardy and succeeds well on any good soil. It yields the heaviest crop of any clover, except alfalfa, and makes superior hay—especially if mixed with timothy—either for dairy cows or for general use. Sow from 12 to 15 pounds per acre, being careful to get it evenly distributed over the ground. Write for prices.

White Dutch Clover—(*Trifolium repens*.) A small variety, having a white blossom. It is of a vining nature, spreading rapidly and will soon cover bare spots if the stand be uneven. It does not attain sufficient height to be profitable for hay, but is superior for pasture, either for cattle or sheep, and unsurpassed for the production of honey. It also makes a beautiful lawn when mixed with Blue Grass. If sown alone, use six or eight pounds per acre. Write for prices.

Crimson, or Italian Clover—(*Trifolium incarnatum*.) This is an annual variety, growing quickly in cool weather, and of great value to sow late in summer or early in the fall, as a cover crop, and to furnish a large amount of fresh vegetable matter to turn under in spring. Like other clovers, it draws nitrogen from the atmosphere, but owing to its short period of growth does not enrich the soil to so great an extent as the longer-lived clovers which transfer the nitrogen to the soil by means of the small tubercles or nodules which form on the roots. This is strictly an annual variety, and plants die after blossoming or seeding.

Aside from its value to turn under, it will furnish a large amount of fresh green forage or pasturage early in spring before other grasses start in growth—fully as early as fall-sown rye—or the crop can be cut as soon as it comes into flower and cured for hay if the weather is favorable. In our section the crop is usually in flower about the middle of May, which is generally a rainy period, so that we have difficulty in getting the heavy soft green growth properly cured. In harvesting for hay, it is extremely important that it should be cut as soon as it comes into flower, as the long seed-heads are covered with slender spiny hairs, and if these are allowed to grow on the heads, they will form hair balls in the stomachs of the animals fed on the hay, and in the case of horses have frequently caused death.

In our locality and further north it is important to get the seed sown early—say in August or very early in September—so that the plants may get a good start before winter sets in. The plant is entirely hardy when grown in well-drained land, but it is liable to winter kill on low, wet ground. In seeding as a catch crop, it is usual to sow the seed broadcast, using 15 to 20 pounds per acre when giving the growing crop on the land the last cultivation. It is best to cultivate the land first, then broadcast the seed and cover by going through the rows again with a light spike-toothed cultivator or leveler, which will cover the seed with from one-half to one inch of fine soil. The seed can be sown among corn, tomatoes, melons, bush beans, or any crop where the growth is sufficiently open to permit of using the cultivator to prepare the seedbed, and where the crop will not require further cultivation to mature its growth. Write for price.

WRITE FOR PRICE

FIELD SEEDS

WRITE FOR PRICES.

All of these articles are governed in value by regular market quotations, and their values are subject to frequent changes, quite as much so as grain and for this reason it is impossible for me to quote prices here which will hold good for the season. But would be pleased to give quotations on any seeds you may need.

White Seed Oats

White Seed Oats—We always aim to have a selected re-cleaned stock of good White Seed Oats. Can sell them at about market price for No. 1 Seed. When ready to buy, write us for prices stating quantity wanted.

I also aim to carry all of the leading kinds of oats. Would be pleased to quote you prices.

Gray Winter Oats

A variety planted almost entirely in the fall. Well and favorably known. Write for price.

Teosinte

Teosinte—Teosinte (Reana luxurians). Grows very quickly and produces a large quantity of forage in warm locations. The leaves are much longer and broader than those of corn, and also more abundant, while the stalks contain a sweeter sap. The seed should not be sown until all danger of frost is past. If cut for green forage, which can be done at any stage during growth, two or more joints should be left at the base of the stalk. These will sprout out quickly into fresh growth, making an even larger crop than at first cutting. With us the plant yields two good cuttings in a season. Farther south more cuttings may be made. In Northern States we should advise drilling seed thinly in rows four feet apart, leaving the plants one foot apart in the row. These plants sucker freely and soon produce a matted row of stalks. The forage is exceedingly tender and is greedily eaten by horses as well as cattle and sheep. Price of seed: Pkt., 5c; oz., 10c; $\frac{1}{4}$ lb., 25c; lb., 75c, postpaid.

Kaffir Corn

Kaffir Corn—This is especially desirable for planting where the summers are hot and dry. The stout stalks grow stiffly erect, from six to ten feet in height. The stalks and blades cure into good fodder and are also desirable to furnish green forage during the summer months. The seed is borne in a loose branching head ten to twelve inches in length at the top of the stalk. On good land Kaffir Corn will yield fifty bushels per acre. The seeds are esteemed for feeding to both stock and poultry. Per pkt., 10c; per lb., 25c; postpaid. By express: Per lb., 10c; 10 lbs., or more at 8c per lb.

Soja Bean

Valuable as a forage crop or green manure. Also as a green fodder and silo plant. Sow 30 pounds per acre after danger from frost is passed. Lb. 25c, postpaid.

Chufas

Chufas, or "Earth Almonds"—A species of grass nut used extensively in warm dry sections for hay and for fattening hogs and poultry, which are pastured on the roots or nuts after the tops have been cut for hay. The small roots or nuts are sown broadcast or in shallow drills early in the spring. One peck of nuts or roots is sufficient to plant one acre of land, as they stool out very freely. Per pkt., 10c; lb., 30c, postpaid.

SEED WHEAT.

When ready to buy any variety of Seed Wheat, write us for quotation on quantity wanted or send in your order and we will give full value at lowest market price.

STANDARD VARIETIES OF WHEAT.

We can supply the following varieties which are extensively grown in the Northwest. Choice re-cleaned seed.

Blue Stem	Red Fife
Little Club	Red Russian
Red Chaff	Forty-Fold
Turkey Red	

Buckwheat

Buckwheat, Japanese—This is a new and highly desirable variety. Sown the same day as Silver Hull, it ripens a week earlier and yields nearly double. The plant is of stronger growth than common buckwheat, while the kernels are of fully twice the size. The flour is fully equal in quality to that of other buckwheats. Per pkt., 10c; per lb., 25c, postpaid. By freight or express: Per peck, 50c.

Cow Peas

Cow Pea—These so-called "Cow Peas" are really a small bean of strong running growth, with a large and abundant glossy dark-brown foliage. The vines may be cut either for feeding green or they can be cured like clover for winter use. They are also most desirable for ensilage; for this with field corn, as the vines running up the cornstalks are easily harvested and the combination of cornstalks and bean vines make excellent ensilage, and the land is more readily cultivated than where the Cow Peas are sown alone.

Clay Cow Peas—This variety is of extra strong growth and most productive of dry seed, being especially adapted for sowing in the Northern States. Seed should not be planted until the trees are well out in leaf. For drills three feet apart use one-half bushel per acre, or one bushel broadcast, while planted in hills four by four feet with corn one-quarter bushel is sufficient. The earlier they can be sown in the spring the larger the crop of dry seeds can be produced, as the vines make a continuous growth until cut off by frost. Per pkt., 10c; pint, 20c; per quart, 35c, by mail, postpaid. Write for prices on larger quantities.

Cow Pea—Whip-poor-Will—A very early maturing variety of upright or bush growth. The seed may be gathered and the plants harvested much more readily than with the running or vine type of growth. Ripening early, the crop may be harvested in time to plant winter grain in the fall, providing the seed can be planted by the middle of May. At the Delaware State Experiment Station this variety yielded thirteen tons of ensilage from one acre of land. The seed is light brown, speckled darker brown, of the same size and coloring as the eggs of the Whip-poor-Will. Plant seed in spring. Prices same as for Clay Cow Pea.

WRITE FOR PRICE.

FIELD SEEDS—Continued

Sorghum or Sugar Cane

Early Amber—The earliest variety almost invariably ripens seed with us when planted early in May. The seed is excellent as a poultry food. Per pkt., 10c; per lb., 25c; 3 lbs. 65c, postpaid.

Early Orange—Larger and stronger growth than the Early Amber, but requires a longer time to mature seed. Popular in the South, it is the most productive where planted for forage in the Northern States. Prices same as for Early Amber.

Broom Corn, Improved Evergreen—This is the most popular variety of Broom Corn to grow for the market, the brush being firm and of a good length and retaining the light green coloring when properly cured. Per pkt., 5c; per lb., 25c, postpaid.

Mammoth Russian Sunflower—Single heads measure twelve to twenty-two inches in diameter, and contain an immense quantity of seed, which is highly valued by all farmers and poultry breeders who have tried it, as an excellent and cheap food for fowls. They eat it greedily, fatten well on it, and attain a bright, lustrous plumage and strong, healthy condition better than on almost any other food. It is the best egg-producing food known for poultry. Every farmer should plant some of the seed in a waste piece of ground, any time from early spring to the middle of July. It is a wonderful improvement on the old native sunflower and besides the great value of the seed as a poultry and stock food, its leaves make a capital fodder, while its strong, thick stalks can be profitably used as fuel. Four quarts of seed will plant an acre. The seed is also recommended as an excellent food for horses, and it is claimed that a fine quality of oil can be manufactured from it. Per pkt., 5c; lb., 35c, postpaid.

Canada Field Peas—(*Pisum sativum*). These do best in a cool climate, or from plantings made very early in the spring. They are now quite largely planted in the Northern States to make an early crop for hay, to feed in the green state to dairy cattle, and for making ensilage. The seed should be planted as early in spring as the ground can be properly prepared. Where the crop is to be cut for hay or feeding, it is best to sow one bushel of stiff strawed oats and one or one and a half bushels of the field peas per acre, putting the seed in with a grain drill or harrowing it after broadcasting, so that it will be covered. When grown in this way, the crop should be cut while the grain of the oats is in the soft or milky stage, at which time the pea vines will be in flower and the whole crop will make a nutritious hay, relished by all kinds of stock when properly cured or made into ensilage. This is an excellent crop also to turn under to enrich the ground; when for this purpose two bushels should be sown to each acre. These can be turned under in June and the land again seeded with the Southern Cow Pea, which makes its growth during hot weather, and which will be ready to turn under in the fall in time for seeding with grain or grass. Write for prices.

Blue Prussian Peas—Very much like the above, except in color. This variety is largely sold for soup peas. Write for prices.

Thousand-Headed Kale

Thousand-headed Kale is a variety of cabbage that produces enormously. The plant attains a height of three to four feet; the stem is covered with leaves. Animals, especially sheep, eat it greedily. It grows well on any land, and is very hardy. We do not hesitate to predict that in a few years' time it will be as popular and as widely used as Dwarf Essex Rape.

The seed may be either drilled or broadcasted. Drilling is the better. If drilled, plant rows 26 to 30 inches apart, as plants should be thinned out so as to stand 16 to 18 inches apart in the rows. In drilling use $\frac{3}{4}$ to 1 lb. of seed to the acre; in broadcasting 1 $\frac{1}{2}$ lbs. 40c per lb., postpaid.

Australian Salt Bush—A most valuable plant for soils containing alkali and for all regions subjected to prolonged drought. It is highly desirable to furnish forage during the hot, dry summer months in our Western and Southern States. The plant needs some little moisture to start it into growth, but when once started will make a strong growth during the hottest and driest weather. Seed should be sown early when the trees are starting out in leaf, so that the plants may become established before hot, dry weather.

The plant is of spreading habit, branching freely and making a thick mat of stems and foliage twelve to eighteen inches in depth over the entire surface of the soil. It grows from a central crown in the same manner as clover, and will not sprout up if cut off below the crown, hence should not be pastured too closely. There is no danger of its becoming a troublesome weed, as it is easily eradicated when cut off below the soil or turned under with a plow. So strong and free-branching is the growth that plants set eight or nine feet apart each way will entirely cover the surface of the soil in a short time. The plant is not hardy in this section. The plants may be cured for forage in the same manner as you would clover, that is, hay should be dried slowly in "cocks" to prevent the leaves from falling off. Single plants have reached a diameter of sixteen feet in one season on the poorest alkali soil. Per pkt., 5c; oz., 10c; $\frac{1}{4}$ lb., 30c; per lb., \$1.00, postpaid.

Speltz or Emmer

Facts about Speltz—It resists drought; it thrives on poor lands, in stony ground, in forest regions, on the prairies; it makes a crop with almost any condition of soil and climate, endures a great deal of frost; is not readily damaged by harvest rains; is not susceptible to rusts or smuts; yields more than oats, yields more than barley; makes better feed than barley; makes excellent flour, makes good bread; the straw is used for fattening stock; the stubble makes good fertilizer; stock eat both grain and straw; ripens very early.

Speltz has now been grown in the United States in a large way for several years, and each succeeding season not only emphasizes its value, but sees its production increasing to an enormous extent. It is found to be adapted to a wide range of soil and climate, to resist extremes of weather, to be of excellent feeding value, and to yield so much more heavily than oats and barley as to insure its increasing popularity and its eventual place among the leading and standard cereal crops of the world. Those who have not grown Speltz should not let another season go by without giving it a place, and an important place, too, on their farms.

Cultivation—In methods of cultivation this is probably the least exacting of all cereals. It should be sown very early, and this can safely be done, as it is not easily harmed by and easily resists early and severe frosts. It should be drilled in at the rate of two bushels to the acre. Price on application.

Winter Rye

The value of Winter Rye is becoming more apparent every year. It is much harder than wheat and can be grown on a greater variety of soils, even on soil that would not produce a fair crop of wheat. It will thrive even in dry seasons and on light sandy loam. It is grown not only for grain, but for fodder and soiling purposes also. When sown in the autumn it starts up very early in the spring and is ready to cut or pasture when about six inches high. It is often plowed under at this stage of its growth as it is then in condition to add great fertility to the soil. Rye does not exhaust the soil as do other grains and can be cultivated longer on the same land than any other crop on the farm.

WRITE FOR PRICE

FIELD SEEDS



Dwarf Essex Rape—A strong-growing hardy biennial plant, growing two and a half to three feet in height, and furnishing a large quantity of excellent forage. The leaves resembling those of Ruta Baga, are almost as large and broad as those of the Southern Collard. It is especially valuable for sheep and hogs, but is readily eaten by other stock. Plantings may be made at any time from early spring until the end of August, as the land becomes available. Growing it in small blocks or fields which will come on in succession will be found the most satisfactory plan.

The seed should be sown broadcast, using eight to ten pounds per acre, or five pounds if sown in drills, to be cultivated until well started in growth. In England, where this plant is very largely grown, the crop is usually pastured, the herd being kept in a small portion of the planting by means of movable fences or hurdles until they have cleared the land, when they are moved to a fresh section. The most generally satisfactory plan, however, is to cut off the green crop and feed it in some permanent enclosure, as the stalks will stand out into a second growth if not cut off close to the ground.

In the South it is planted for a late fall and winter crop of forage, while in the cool Northern States it makes an excellent crop of cheap summer forage to take the place of cow peas and other warmth-loving plants which are depended upon for this purpose in the South. Planters not familiar with this crop should make sure that they are planting seed of the True Dwarf Essex Rape, which is entirely hardy and does not make seed until the second season after planting as a great deal of cheap seed of an annual variety is offered on the market and which is comparatively worthless as a forage plant; seeding freely the first summer, it is liable to become a troublesome weed. Write for prices.

Sand, Hairy, or Winter Vetch—(*Vicia Villosa*)—It is the earliest crop for cutting, being nearly a month earlier than Scarlet Clover, and a full crop can be taken off the land in time for planting spring crops. Being much harder than Scarlet Clover, this is the forage plant to sow in Northern States where Scarlet Clover winter kills, though it is equally valuable in the South. Every dairyman and stock-breeder in the United States should have a field of it; and if you try it once, you will never be a season without it.

It will also prove valuable for a hay crop in the South and dry Western regions, as it may be sown in the fall and will make a luxuriant growth during the fall and spring months, and will yield a heavy crop, which may be cut and stored before the droughts set in. It is perfectly hardy throughout the United States, remaining green all winter, and should be sown during August and September mixed with rye, which serves as a support for the plants, or in spring with oats or barley. Write for prices.

Spring Vetches, or Tares—(*Vicia Sativa*)—Growing into favor more and more each year for plowing under. They have the advantage over peas in that they make a greater growth of vine, while as the seed is much smaller in proportion to peas, a smaller quantity is required to plant an acre. They are valuable also as a green food for milch cows. Sow 50 pounds to the acre. Prices on application.

Vetch and Rye for Early Feeding—Vetch and rye make one of the very best soiling crops that can be sown west of the Cascades. They require a good rich, well-cultivated soil, and should be sown or drilled early in the fall. With early sowing and a favorable winter, this crop can be harvested early in the spring and fed green, and where allowed to stand the second crop will come on and can be cut for hay. Vetch and oats make one of the most nutritious hay that can be sown, and one of which stock are very fond. To harvest this combination as hay requires keeping back the growth until late in the spring, preventing the harvesting coming on before July, for, owing to the heavy growth, we must look for good haying weather to insure proper curing. To prevent the crop coming on too early, either cutting and feeding green light pasturing will be required.

The proper amount of seed required for an acre will be 50 pounds each of vetch and rye, or 50 pounds of vetch and 60 pounds of oats, when the latter mixture is used.

Remember to get the best results sow early in the fall, thus allowing the plants to get thoroughly rooted before cold weather sets in. Where hay alone is all that is desired, vetch and white oats can be sown early in April.

German Millet—(True Southern Grown Seed)—In the North Millet is sown almost altogether for hay, and for that purpose Southern grown seed is much the best. It grows taller than does that from Northern seed, and that means more hay. It is finer than that from Northern seed, and that means better hay. In fact, it is our judgment, based on an experience of many years, that a farmer had better, from the standpoint of profit alone, pay \$2.00 a bushel for true Southern grown German Millet than to sow the best Northern Millet as a gift. Millet seed produced in the North, even from Southern seed, becomes what we call Common Millet. Not only does the plant change in character, becoming coarser and much more dwarf, but the seed itself shows a change, and is readily distinguished by those experienced in handling it.

WRITE FOR PRICES

Miscellaneous Farm Seeds

Millet

Common, or Northern Millet

Common, or Northern Millet—As stated before, Common Millet does not yield as much hay or as good hay as the German (Southern Seed). It is usually much cheaper than true German. We have in store this season an especially fine lot of Common Millet which is as nearly perfect in quality as Northern Millet can be. Write for prices.

Hungarian

Hungarian—(Dark Seed)—Often called Hungarian grass. Many regard this as being better even than German Millet, as it is about one week earlier and requires less moisture. The hay is fine and of excellent feeding value. Write for prices.

Early Fortune Millet

Early Fortune Millet—A most promising new variety, of which astonishing yields are reported. It is very early, and it is claimed to be rust proof, and that chinch bugs will not eat the plant. The seed is very beautiful and distinguished in appearance. Write for price.

Hog or Broom Corn Millet

Hog or Broom Corn Millet—This is grown for the same purposes for which other Millets are sown, but makes inferior hay unless cut very young. It however, yields enormously of seed, even 60 to 70 bushels to the acre, and this seed is very advantageously used for fattening swine and other stock, and is of special value for this purpose in sections where corn cannot be safely or cheaply grown. Write for price.

Siberian Millet

Siberian Millet—A new variety from Russia, earlier than either German Millet or Hungarian and consequently very valuable for the North and yields remarkably. It is extremely hardy, withstands drought wonderfully and is about two weeks earlier than the German Millet. The leaves are very tender, making it excellent for hay. The South Dakota Experiment Station pronounces it "the most promising variety yet tested." The plant stools to a remarkable degree, as many as thirty to forty stalks have been grown from one seed, and is not subject to rust. Write for price.

Japanese Millet

Japanese Millet—Improperly called "Billion Dollar Grass." Entirely distinct from all other Millets. It grows from 6 to 9 feet high, stands up remarkably and yields enormous crops. When cured it makes good hay and in quality is superior to corn fodder. It is relished by all kinds of stock. It may be sown broadcast at the rate of 15 lbs. per acre, but it is better to sow in drills 12 to 18 inches apart, using 10 to 12 lbs. to the acre. Cultivate until the plant is 18 inches high, when its rapid growth will smother all weeds. It does best on low moist ground. Write for price.

Barley

White Hullless Barley—The earliest variety of barley; if sown in September, will ripen about the end of June. The grain is flinty and translucent, not unlike wheat, and weighs about sixty pounds to the bushel. It will yield a magnificent crop of hay, free from beards. Only 100 lbs. is required to sow an acre. We can usually supply all the standard varieties. Write for price.

Flax

Flax seed can be bought from almost any farmer or elevator in the Northwest, but it is not what we call Seed Flax. It is a rare sight now to see a lot of flax which does not contain mustard, and the ordinary fanning mill or cleaner will not remove all the mustard. It requires special machinery to make seed of any grain, and this is especially true of Flax. To sow mustard is to reap the whirlwind. Cleaning Flax so as to make it "right" for seed is a somewhat expensive operation and involves a very considerable waste. So our price may seem high, but write for sample, use the magnifying glass, and compare it with Flax from the farm or elevator and judge for yourself if our seed is not worth to you all it cost.

Hemp Seed

For Sowing.

We receive many inquiries for hemp seed to be used to smother quack grass and Russian Thistle. When used for this purpose it should be sown thickly to produce a dense mass. It will grow quite tall and exclude light and air and for this reason is better to use than millet and buckwheat in order to kill off obnoxious weeds. When sown to produce fibre, use about a bushel of seed to the acre. Price, per lb., 30c, postpaid. By freight, lb., 20c; 10 lb., at \$1.60; 100 lbs., at \$15.00.

Japanese Buckwheat

Japanese Buckwheat—Entirely distinct from all other varieties. The plants are large and vigorous, the straw being much heavier and of a more branching habit, thus requiring less seed to the acre. It has the advantage of remaining for some time in bloom, produces seed earlier and in greater abundance. On this account it can be grown further north. It resists drought and blight very well. The seed is rich dark brown in color and larger than Silver Hull. As much as forty bushels to the acre has been harvested of this variety making it the most profitable to raise. Write for price.

Silver Hull Buckwheat—This valuable variety originated abroad and is a decided improvement on the old black or gray sort. It is early, remains longer in bloom than other sorts. A fine variety for honey bees. The grain is of a beautiful light gray color, and has a thin husk. Millers prefer Silver Hull, there being less waste and it makes whiter, better and more nutritious flour than other varieties. Write for prices.

FLOWER SEEDS

SUCCESS WITH FLOWER SEEDS

We are convinced that many of the failures with flower seeds are due to lack of proper conditions; and while it would be impossible in the space at our disposal in this catalogue to give explicit directions for each and every variety which we offer, we feel sure that if the general directions given below are followed that success will be the rule. These directions, we may say, are written for the latitude of Portland. Customers living in other sections can readily adapt them to their localities.

For all flower seeds which should be started indoors, and this includes many of our best and brightest summer flowers, such as Heliotrope, Lobelia, Salvia, Verbena, etc., the best plan is to sow in earthenware seed pans, house frame — or boxes [about 2 inches deep], which should be filled to the depth of an inch with broken pots, coal ashes, or any rough material that will furnish perfect drainage. The upper inch should be nicely sifted soil, composed, if possible, of about one-third each sand, leaf mould and light garden loam. Press firm and evenly, and water thoroughly the day before sowing. Sow the seeds thinly over the surface, covering about one-eighth of an inch and pressing firmly; cover with a pane of glass or one or two thicknesses of newspaper, to prevent the too rapid evaporation of the moisture, and keep in a temperature between 60° and 70°. Water carefully as needed. The importance of uniform attention to this detail is one that can only be learned by experience and observation. To omit a single watering, or too frequent, indiscriminate watering, usually leads to failure. Remove the glass or covering after the seeds have germinated, and when the seedlings are large enough to handle they should be transplanted into similarly prepared boxes an inch apart each way, or put into small pots and kept in same until time to plant out in the open ground. At all times they should have an abundance of air; otherwise the young seedlings are liable to damp off.

For most of the ordinary annual flowers, such as Sweet Alyssum, Calliopsis, Calendula, Marigold, Mignonette, Nasturtium, etc., the simplest method is to sow directly out of doors when danger of frost is past in the space where they are intended to flower. The ground should be dug and raked fine on the surface, sowing the seeds evenly and thinly, either in lines or beds, covering not over four times their size, and firming the soil over them. Should they come up too thickly, as most of them are likely to do, thin out so that the plants will stand from 4 to 12 inches apart, according to the variety. This plan is also adapted to many varieties usually started indoors, including Asters, Verbenas, Stocks, Salvia, etc., etc.; but as a rule their germination is more certain under glass, and as they begin to flower so much earlier when started indoors, the extra trouble is well repaid for by their increased blooming period.

The seeds of most Hardy Perennials may be sown at any time from January to October. Early sowing should be made indoors in boxes in the same manner as described above, or they may be sown out of doors in Spring after the frost has gone and transplanted into their flowering position in early autumn or the following spring. Many varieties succeed best sown in autumn, in which case they should be sown in a cold-frame, transferring them to their permanent quarters the following spring.

ASTERS

GIANT COMET, OR POODLE ASTERS.

This class is one of the handsomest of the tall-growing sorts. The plants grow about 18 inches high and bear in great abundance their immense flowers. These flowers, with their long, twisted petals, strikingly resemble Japanese Chrysanthemums.

White, large. Light blue. Salmon rose. Rose. Dark blue. Bright carmine. Bright red. Lavender.

The Bride.—The flowers, at first pure white, change to a lovely pink and finally to a beautiful rose tint; a most charming variety for cut flowers.

Each of above, pkt., 10c; any 3 for 25c; any 6, 45c; by weight, $\frac{1}{8}$ oz., 25c; $\frac{1}{4}$ oz., 40c.

Giant Comet—Mixed. Includes the above colors and others. Pkt., 10c; $\frac{1}{8}$ oz., 20c; oz., \$1.25.

New Crego—This beautiful, new, free-flowering Aster is one of the best for general planting. The plant is a strong, healthy grower, and will produce 12 to 15 long-stemmed flowers of the most graceful and pleasing style. With ordinary care you can grow flowers measuring 5 to 6 inches across. Pure white, shell pink, rose, purple or mixed. Pkt., 15c; $\frac{1}{8}$ oz., \$1.00.

New Mikado—A new Aster of sterling merit; comet style and very popular among florists for cutting. Plants produce a profusion of beautiful large flowers. Shell pink or pure white. Pkt., 15c; $\frac{1}{8}$ oz., 60c.

Rose City Mixture Aster—This special mixture includes all of the newest, and is truly an unrivaled mixture. This mixture will afford a splendid supply of flowers during the entire season. The best mixture on the market. Pkt., 10c; 3 pkts., 25c.

ALYSSUM

Alyssum, Sweet—A very pretty plant for beds, vases, baskets, edgings or rock work. Sweet scented and blooms profusely all summer. White. Oz., 25c; pkt., 5c.

Little Gem—Very dwarf—4 inches—and spreading. They quickly become one mass of white, fragrant flowers, remaining in full bloom from spring to fall. Oz., 30c; $\frac{1}{2}$ oz., 20c; pkt., 10c.



FLOWER SEEDS—Continued

ASPARAGUS PLUMOSUS

Asparagus Plumosus—Probably the most popular house plant today. You can grow it for yourselves and neighbors. The leaves are bright green, gracefully arched, surpassing Maiden Hair Ferns in grace, delicacy of texture and richness of color. Pkt. (7 seeds), 10c; 25 seeds, 25c.

Baby's Breath—(See Gypsophila.)

ANTIRRHINUM

(Snapdragon)

Antirrhinum or Snapdragon—The Snapdragons do not receive the attention they deserve. They are undoubtedly one of the best cut flowers which can readily be grown from seed, while for beds or borders they are a constant source of pleasure, being in flower all the time. They succeed best in a rather light soil, in a sunny position, and although perennials, are best treated as annuals.

Giant—White, scarlet, garnet, yellow, pink, striped or mixed. Each, per pkt., 10c.

Tall Mixed—Extra fine selection; best for cutting. Oz., 40c; pkt., 5c.

AGERATUM

Ageratum—One of the best of summer flowering plants grown from seed. The plants start readily, grow rapidly and soon come into bloom, and when they begin to bloom they flower uninterruptedly throughout the season. During the hot, dry summer months there are no brighter or more freely produced flowers. Set the dwarf sorts ten inches apart, they soon make a low mass of charming blue or white, and are never disappointing. Pkt., 5c.

AQUILEGIA

Aquilegia—(Columbine).—Charming hardy perennial plants growing from 1 to 3 feet high, bearing in countless numbers through May and June their exquisite blossoms of clear blue, white, rose, yellow, purple, striped, etc. For planting in permanent borders or naturalizing along the edges of woods or shrubbery this old-fashioned favorite is one of the best of all hardy plants. Pkt., 5c.

BACHELOR'S BUTTON

Bachelor's Button—Also known as Centaurea, Cornflower, Blue Bottle, Ragged Sailor, Sweet Sultan, etc. These are among the most attractive of all hardy annuals and one of the most popular of all old-fashioned flowers.

Blue—This is the dark blue sort so much in demand for cutting. Oz., 25c; pkt., 5c.

White—Oz., 25c; pkt., 5c.

Mixed—All varieties. Oz., 25c; pkt., 5c.

CANTERBURY BELLS

Campanula—Bellflower—Well-known, beautiful, hardy herbaceous perennials, bearing a great profusion of attractive bellflowers; thrives best in light, rich soil; some of the varieties flower the first season if sown early.

Campanula—Medium—Very ornamental garden plants of easiest culture; excellent for cutting; hardy biennial 2½ feet high, producing large bell-shaped flowers of exquisite colors.

Single Finest Mixed—All colors. Pkt., 5c; 1-8 oz., 20c.

Double Blue, White, Lilac, Rosy Carmine or Mixed.—Pkt., 10c; ¼ oz., 30c.

CANDYTUFT

Candytuft—Candytuft has long been among the most highly prized of garden annuals. The best effect is produced by raising the plants in masses, and sowing the seeds where the plants are to bloom.

Odorata—Sweet scented; white. Pkt., 5c; oz., 20c.

White Empress—Very sweet and attractive. Pkt., 10c; oz., 50c.

Carmine or Purple—Pkt., 5c; oz., 40c.

Mixed—All colors. Pkt., 5c; oz., 20c.

Sempervirens—Perennial; white. Pkt., 10c; oz., 25c.

COBOEA

Coboea Vine, Cathedral Bells—One of the handsomest and most rapid growing annual climbers, running up to 30 feet in a season. The flowers are bell-shaped and of a purplish lilac when full grown. It is a very prolific bloomer, one that makes a show the first year, both in vines and flowers, one that is always clean of insects. We know of none better. Pkt., 5c; ¼ oz., 15c.

CARNATIONS

Carnation—A half hardy, perennial, used generally for greenery. The florist's trade in winter and for a general garden favorite in summer. There are a large number of varieties and colors, but the early flowering mixtures are recommended for out-of-door culture. Sow the seed early in the year and transplant in March or April.

Fine Double Mixed—The best for garden culture. Pkt., 10c.

Finest Double Mixed—Saved from extra fine flowers. Pkt., 25c.

Chabaud's Everblooming—Raised by a famous French specialist. Blooms in five months after being sown, and continues to flower in the greatest profusion indefinitely. Mixed colors. Pkt., 25c.

Marguerite—This exceedingly valuable departure in Carnations has proved a complete success. Its most important feature is the fact that it flowers easily the first year from seed—that is, from seed sown in February or March, plants can be had in full bloom by August. The proportion of fine double flowers is very great, being usually 70 to 80 per cent; these are varied and beautiful in color and exceedingly useful for cutting. The habit of the plant is robust, and hence very useful for bedding purposes. Finest mixed. Pkt., 5c.

CYPRESS VINE

Cypress Vine—(Ipomoea Quamoclit).—A tender, climbing annual, with soft fern-like foliage and small starlike flowers, in red and pink, or white. Scarlet, pkt., 5c; oz., 30c. White, pkt., 5c; oz., 30c. Mixture of several colors, pkt., 5c; oz., 30c.

COSMOS

Cosmos—A tender annual, with fine-cut, feathery foliage and large, showy blossoms in rose, crimson, pink and white. The late-flowering or giant type grows 5 to 6 feet high and its blossoms are larger than the early varieties, or about 4 to 5 inches in diameter. They bloom late in the fall or about November 1st, and rarely blossom very far north. The early varieties bloom in July. Sow about March 1st and transplant in May.

Mammoth Flowering—White, pink, red or mixed. Pkt., 10c; ¼ oz., 20c.

FLOWER SEEDS—Continued

BEAN

Bean, Scarlet Runner—The well-known rapid-growing annual climber, producing bright red flowers, from July to September. Pkt., 5c; per lb., 20c, postpaid, 30c.

CLARKIA

Clarkia—A hardy annual, of easy culture, growing about 18 inches high and bearing bright rose, white, or purple flowers in great profusion. Native of California. Seed sown in the fall will give early blossoms in spring. Seed can be sown almost any time. Double mixed. Pkt., 5c; oz., 25c.

Choice Double Mixture—A fine mixture of various colors and types. Pkt., 10c.

German Extra Fine Double Mixed—A splendid strain. Pkt., 15c.

BALSAM

Balsam or Lady Slipper—Double Camelia Flowered—An old and favorite garden flower, producing its gorgeous masses of beautiful, brilliant colored double flowers in the greatest profusion; of easy culture; succeeds in a good rich soil. Our strain is unrivalled for great variety and size of flowers. Two feet. Pkt., 5c.

CALLIOPSIS

Calliopsis, or Coreopsis—Very showy and attractive. Always covered with a mass of bright flowers. A fine cut flower.

Choice Mixed Dwarf Annual, Single Pkt., 5c; ¼ oz., 20c.

Choice Mixed Double Annual, Pkt., 5c; ¼ oz., 20c.

Lanceolata—A perennial, blooming the first year; flowers light yellow, single; very fine for cutting. pkt., 10c; ¼ oz., 50c.

Grandiflora—Perennial; mixed. Pkt., 10c; ¼ oz., 25c.

DAISY

Daisy, or Bellis Perennis—Plants of Double Daisy will bloom the first summer and will continue to bloom for years if given slight protection during the winter. They are very pretty when in bloom, and deserve to be grown much more than they are. They commence blooming in April and continue to bloom until summer. They are not very particular as to soil, but should be grown where they have partial shade.

Mammoth Daisy—Forsize of flowers and doubleness these have no equals. The flowers average 1½ to 2 inches in diameter, are very double, ranging in colors from snowy white to pink and blood-red, with the prettiest combinations of pink and white. Pkt. (200 seeds), 10c; 3 for 25c.

Daisy, Shasta Daisy—A fine perennial plant bearing large white single blossoms, with yellow centers; an excellent cut flower and admired everywhere. Soak seed in warm water over night before sowing. Pkt., 10c.

Alaska—One of Burbank's new selections. Pkt., 15c.

DIGITALIS

(Foxglove)

Digitalis, or Foxglove—A hardy perennial, blooming the second year from seed. Grows usually about 3½ feet, although in very rich soil sometimes 6 feet. The bell-shaped flowers are borne on long spikes, and come in shades of purple, lavender, rose and white, all spotted lightly inside the blossom. Thrives best in cool, shady locations. Fine mixed, pkt., 5c; oz., 50c.

ESCHSCHOLTZIA

Eschscholtzia, or California Poppy—A hardy annual, with fine-cut, feathery foliage and beautiful velvety cup-shaped flowers. Grows from one to one and a half feet high, and blooms profusely. Seed may be sown in the fall, and any time thereafter till April, and blossoms may be had from early in January till late in summer. Of the easiest culture. Any soil will do, but the better the soil the larger the plants and blossoms. It is best to sow the seed in the garden, where the plants are to remain, as they do not transplant easily.

Golden West—Very large, orange-colored blossom, shading to canary yellow at the edges. Pkt., 5c; oz., 15c.

Mixed Yellow—A mixture of the popular orange and yellow varieties. Pkt., 5c; oz., 15c.

Mixtures of all varieties. Pkt., 5c; oz., 20c; per lb., \$2.00.

ECHINOCYSTIS

Echinocystis—(Wild Cucumber Vine)—A well-known vine, common in many sections, and the quickest climber known for covering verandas, old trees and houses, trellises, etc., never suffering from the heat, but retaining its fresh and lively-green color; never infested with insects, and very profuse in bloom. It will sow itself and come up in the same place. Pkt., 5c; oz., 20c.

DAHLIA

Dahlia—A well-known and popular late summer and autumn flowering plant. Is grown from seed or propagated from the bulbous roots. The seed may be planted early in the hotbed and the plants set out in May after all danger of frost is over. By sowing the seed early the plants may be made to bloom the first year.

Cactus—Mixed, double, with pointed petals. Pkt., 10c.

Double—Mixed, pkt., 10c.

Single—Mixed. The most easily grown and also the most satisfactory from seed. Pkt., 10c.

FOUR O'CLOCK

Four O'Clock, or Mirabilis—(Marvel of Peru)—A hardy annual, growing luxuriantly in any ordinary soil, and bearing a profusion of bright, handsome flowers of various colors, shades and markings. Flowers open at four o'clock, close in the morning. Choice mixed. Pkt., 5c; oz., 15c.

GAILLARDIA

Gaillardias—These are undoubtedly among the choicest of hardy perennials; the flowers are large, very numerous, excellent for cutting, and of the most brilliant shades of orange, crimson, scarlet and vermilion, and very often a combination of all these colors in one flower. Many colors. Pkt., 5c; ¼ oz., 15c; oz., 60c.

Annual Gaillardia—(Perfection)—The beautiful annual Gaillardia (Lorenziana) is undoubtedly one of the most valuable annuals we have for cut flowers. This variety, an improvement on the above sort, produces very double flowers as round as a perfect ball in the most varied color, and are borne on long, slender stems; when cut will keep over a week. Pkt., 5c; ¼ oz., 15c; oz., 50c.

HELIOTROPE

Flowering Heliotrope Plants—(From seed grown in spring)—It is but little known that seed sown in February and March will produce large flowering plants the first summer. Our mixture contains seeds from many-named sorts, and will produce fine plants with proper treatment. Pkt. (100 seeds), 5c.

FLOWER SEEDS—Continued

FORGET - ME - NOT

Forget-Me-Nots—(*Myosotis*)—Half-hardy perennial, which flowers the first year from seed if sown early. Will bring forth lovely blossoms throughout the whole summer and fall. Flowers are borne on long stiff stems, and of the most exquisite colors. They succeed best with moisture in a somewhat shaded position. Blue, pkt., 5c; white, pkt., 5c; mixed, all varieties, pkt., 5c; oz., 30c.

GYPSOPHILA

Gypsophila, or **Angel's Breath**—An annual that should be in every garden, for it thrives everywhere, and furnishes the loveliest material for all kinds of bouquets, either roses, carnations, dahlias, or anything else. Pkt., 5c; ½ oz., 10c; oz., 15c.

Paniculata—(*Baby's Breath*)—Flowers white. A hardy perennial, which will stay in the ground all winter. Pkt. 5c.

HELIANTHUS

Helianthus (*Sunflower*)—Hardy annuals, of stately growth, remarkable for the size and brilliancy of their flowers. Very useful as cut flowers. Effective in forming background of large beds or borders and for distant effect.

Chrysanthemum Flowered—Perfectly double; the color is the brightest golden yellow. The flowers are so perfect in form that they resemble very much double Chrysanthemum-Flowered Asters, with long stems; grows seven feet high, and bears profusely all summer long. Pkt., 5c.

Giant Russian—Immense single flowers, yellow, with large, black center, 6 feet. Pkt., 5c.

HELICHRYSUM

Helichrysum.—(*Everlasting Flower*).—A free-flowering, hardy annual, growing four to five feet high and bearing beautiful straw-like flowers in a great variety of shades and colors. The stems are long and the blossoms large. It is the best and most satisfactory of the everlasting flowers, and makes a very handsome dried bouquet. Mixed. Pkt., 5c.

HOLLYHOCK

Hollyhock—A hardy perennial of upright, stately growth, five to eight feet high. The very double varieties are the most desirable, but the newer, semi-double, fringed types are also very popular. Hollyhocks make a fine row in the garden, or a fine background next to a building or high wall or fence. Double varieties, mixed: Pkt., 5c. Black, Blood Red, Canary Yellow, Rose Pink, Salmon, Snow White. Pkt., 10c; 6 pkts., assorted, 40c; oz., \$1.50.

Allegheny—Mixed. The semi-double, fringed variety. An artistic and pretty sort. Pkt., 10c; oz., \$1.25.

KOCHIA

Kochia (*Standing Cypress*, or *Belvedere*).

Tricophylla—An easily grown annual, which, sown thinly in spring, soon forms a cypress-like hedge of the most lively green and of perfect symmetry; by mid-summer it attains a height of about three feet, and on the approach of autumn the whole plant becomes a deep red; a splendid plant to divide the vegetable from the flower garden, or for forming a hedge for the summer for any purpose. ¼ oz., 25c; pkt., 10c.

LATHYRUS LATIFOLIUS

Lathyrus Latifolius.—[*Perennial* or *Everlasting Pea*]. A hardy perennial climber flowering the first year if seed is sown in the fall. Leaves and stems smooth. Flowers resemble sweet peas, but are borne on strong stems, with eight to ten blossoms to the stem. Is not fragrant, but is hardy and showy, and thrives in any good soil. Pkt. 5c.

IPOMOEA

Ipomoea.—An extensive genus, including many well-known garden flowers. Are tender climbing annuals, from five to ten feet long, and all classes are desirable. The seed of several varieties, especially the moon flower, should have the outer shell punctured and then soaked in water for twelve hours or more to germinate it.

Grandiflora Alba.—[*Moon Flower*]—Large white blossoms, five to six inches across, which expand at night. The vine grows very rapidly, as much as fifty feet in a season, and is covered at night and in the early morning with a multitude of fragrant white flowers. Pkt., 10c.

New Moon Flower.—[*Sky Blue*].—Of strong, vigorous growth, the plants quickly attain a height of twelve to fifteen feet. A dense mass of large heart-shaped leaves forms a most appropriate setting for the large sky-blue flowers, which come in September in great profusion. The flowers measure nearly four inches across, and are surpassingly beautiful—of the softest cerulean blue, shading to white at the throat. May be grown as a pot plant. Pkt., 10c.

LARKSPUR

Delphinium, or **Larkspur**—The hardy varieties are of bewitching beauty in the perennial borders, or among shrubs. The brilliant flower spikes can be seen from a distance, and are strikingly effective. If sown early, many of the plants will bloom the first year. The plants will bloom almost continually if the blooms are removed as they fade.

Annual Larkspur (*Giant Hyacinth-Flowered*)—This hardy annual derives its name from the striking resemblance of the flowers to a double Hyacinth. The plants grow two to three feet high; the colors are both brilliant and delicate. Their culture is the easiest possible; the seed should be sown early where the plants are intended to remain. Mixed. Pkt., 10c; 3 for 20c.

Double Dwarf Rocket—Pkt., 5c; ¼ oz., 10c.

Double Tall Rocket—Mixed. Pkt., 5c; ¼ oz., 10c; oz., 30c.

Perennial Varieties—**Special Mixture of Perennial Larkspur** includes all leading sorts. This mixture is very valuable for its great variety in shades of color, which range from yellow to pure white; from the palest and most chaste lavender up through every conceivable shade of blue to deep indigo; and for the variety of size and form of their individual blooms, some of which are single, some semi-double, and some double. Pkt., 25c.

Formosum.—The variety most often seen. Bright blue flowers with white center. Tall spikes, three feet Pkt., 10c.

LOBELIA

Lobelia.—A hardy annual and hardy perennial. The annual grows four to six inches high; is of compact growth, and literally covered with small bright flowers. By cutting back the plants during the summer and giving plenty of water, they may be kept in flower all summer. Used for ribbon work and borders or hanging baskets.

Lobelia—The following dwarf and trailing varieties of this popular and beautiful flowering plant will be found most desirable for pot culture, edgings, hanging-baskets, etc., blooming profusely from June to November. The hardy perennial varieties are among the most attractive of our garden favorites, producing beautiful spikes of handsome flowers.

Crystal Palace Compacta—Rich, deep blue; dark foliage; the finest dark blue for bedding. 50c per ½ oz.; pkt., 10c.

Speciosa—Ultramarine blue; dark-leaved; trailing. Pkt., 5c.

Gracilis—Light blue; light green foliage; trailing. Pkt., 5c.

FLOWER SEEDS—Continued

MARIGOLD

Marigold.—A hardy annual, shrubby plant, in dwarf and tall varieties, growing from six inches to three feet high. Foliage, bright green, deeply cut, and graceful. The flowers are various shades of yellow and brown. The tall varieties are very valuable for large bedding or background work, and the dwarf varieties for borders.

Eldorado.—[Called "The African Marigold."]—The best tall variety, with large, very double blossoms. Mixed. Pkt., 5c; oz., 25c.

Dwarf French, Legion of Honor.—Single brown and yellow. Pkt., 5c.

Dwarf French.—Striped. Pkt., 5c.

Dwarf French.—Mixed Small flowers. Pkt., 5c; oz., 50c.

Tall French Mixture.—A mixture of tall double, colors in yellow, brown, and stripes. Small flowered. Mixed. Pkt., 5c.

MOONFLOWER

Moonflower.—Bears lovely white flowers, five to six inches in diameter, with a fine painted star in the center. The flowers open at dusk, or earlier on cloudy days, at which time they are deliciously fragrant. Start the seed in the house and set out as early as safe in the spring. Pkt., 10c.

NICOTIANA

Nicotiana.—[Large-Flowering Hybrids.]—Most showy and profuse-flowering garden annuals, giving a continuous display of brilliant flowers through summer and autumn; easily grown from seed, commencing to flower in a few weeks from sowing, thriving in a sunny position in any good garden soil. The plants, of branching, bushy habit, 2 to 3 feet high, carry the flowers in clusters, the whole being literally ablaze with them, thousands being borne on a single plant during the season; the glorious effect in the garden is unsurpassable. The plant and flowers are similar in habit and form to those of the popular white-flowering fragrant *N. affinis*, but the flowers of these new hybrids are much larger, measuring from 1½ to 2 inches across and very fragrant. Colors: purple, white, dark red, lightred, salmon, crimson, violet, rose and pink.

Nicotiana Affinis Hybrids.—Mixed colors. Pkt., 10c.

Affinis.—The popular free-flowering variety; fragrant star-shaped white flowers; annual, 3 feet high. Pkt., 5c.

NIGELLA

Nigella.—(Love in a Mist, or Devil in the Bush)—A compact free-flowering plant, with finely cut foliage, curious-looking flowers and seed pods; of easy culture growing in any garden soil; hardy annuals; blue and mixed; one foot. Oz., 25c; pkt., 5c.

MR. J. J. BUTZER, Portland, Ore.

Dear Sir — I am writing to let you know how well pleased I am with your seeds. My sweet peas grew to be six feet six inches high and started to bloom about the 6th of June and have bloomed ever since, and very heavy. I am well pleased with their colors and long stems.

Hoping this will be of some help to you, I am
Yours truly,

AMELIA GLASSER.

MR. J. J. BUTZER, Portland, Ore.

Dear Sir:—Received your letter some time ago and was so busy I did not take time to answer it, but will do so now. You ask me if I was pleased with your seed and what luck I had. Now, I will tell you. I have always had the best of luck with your seed and was always pleased the way you have sent me the same. I will need a good deal of seed this Fall and you may count on my order.

Hoping that this will be satisfactory to you, I am

Yours truly,

JOHN SIGRIST.

MORNING GLORY

Morning Glory (Convolvulus)—One of the most free-flowering and rapid-growing climbers, thriving in almost any situation. The flowers are very delicate, brilliant and beautiful.

Tall Morning Glories Mixed—A great variety of colors of the old-fashioned, popular, rapid-growing climber. Oz., 15c; pkt., 5c.

Dwarf Morning Glories Mixed—Hardy annual, one foot in height. Colors range from pure white to deep purple. Oz., 15c; pkt., 5c.

Japanese Improved, or Giant Mikado Morning Glory—The flowers are of gigantic size, and the colorings and markings beyond description, ranging from snow-white to black purple, with all the possible intermediate shades, such as pink, rose, fiery red, copper-red, carmine, crimson, pale blue, deep blue, royal purple, maroon, indigo, bronze, slate, brown, cherry and ash-gray. Others are edged with white, having throats of one of the above colors; there is also an endless number having flowers spotted, marbled, striped, flaked and splashed. They are beyond question the largest and most beautiful of this handsome family of easy-grown climbers, and are the Orient's best gift of flower-lovers. Wherever climbers can be grown our New Giant Mikado Strain should have a prominent place. The seed we offer is of our own importation direct from Japan, and embraces plain singles (which are really the handsomest), semi-doubles, quilled and frilled, crimped and scalloped, and double. Oz., 25c; pkt., 10c.

RICINUS

Ricinus (Castor Oil Bean)—Ornamental plants of stately growth and picturesque foliage, with brilliant colored fruit producing a sub-tropical effect; fine for lawns, massing or center plants for beds.

Borboniensis—Very large and beautiful green foliage; 15 feet. Oz., 15c; pkt., 5c.

Gibsoni—Dwarf branching habit deep red foliage; 5 feet. Oz., 15c; pkt., 5c.

Cambodgensis—The main stem and leaf stalks are shining ebony leaves large, regularly divided and richly colored; 5 feet. Oz., 20c; pkt., 5c.

Zanzibariensis—Have light and dark green leaves and some of coppery bronze, changing to dark green with reddish ribs. Oz., 15c; pkt., 5c.

Mixed—All sorts best varieties. Oz., 15c; pkt., 5c.

MIGNONETTE

Mignonette.—A hardy annual, growing six to twelve inches high and bearing pyramidal-shaped flower spikes, made up of thickly-set flowerets, which are exceedingly fragrant. Grows easily from seed and can either be transplanted from boxes or sown out in the garden and thinned to four or six inches. Sow in the fall for early blossoms in the spring. Valuable for potting, or for bedding, or for border. The flowers are not attractive except for their fragrance.

Sweet-Scented (Reseda Odorata)—The old-fashioned variety with small spikes, but the most sweetly scented of all. Oz., 15c; pkt., 5c.

Golden Machet—Distinct variety of Machet, differing from the type by its massive spikes of golden yellow blossoms. Pkt., 10c.

Machet—Adapted for pot culture; dwarf pyramidal growth, bearing numerous flower stalks; highly colored and very fragrant. Oz., 75c; ¼ oz., 25c; pkt., 10c.

Our Seeds Give Satisfaction.

TALL OR TRAILING NASTURTIUMS

These are all of strong vigorous growth, throwing out running shoots that can be trained upon strings or wires, or can be readily made to climb ordinary paling fences or wire netting. They are very showy also planted at the top of a steep slope and allowed to run down the bank.

A "packet" contains from 30 to 50 seeds, an ounce from 175 to 225 seeds.

Few flowers impart such rich "bits of beauty" to the garden as the different types of Nasturtiums. In addition to their use in the garden and on trellises, we would recommend planting the seed freely along fences, hedges, etc., or wherever it is desired to have bright colors in profusion. You cannot have too many.

TALL
MIXED COLORSButzer's Rose City
Mixture

This mixture is absolutely unequaled; nothing better to be had anywhere. In it will be found all the choicest colors of tall Nasturtiums, of all the new shades, as well as the standard sorts. Pkt., 5c; oz., 10c; ¼ lb., 30c; lb., \$1.00.

Cameleon

Not only are the flowers of various colors produced on the same plant, but these flowers are variously splashed and bordered. On the same plant are found self-colored flowers, some curiously stained, while others are banded with light or dark shades. Pkt., 5c; oz., 15c; ¼ lb., 35c; per lb., \$1.20.

Plack Prince

Black Prince—The flowers are of such an intensely dark rich maroon as to appear nearly black. The foliage also is so intensely dark that it might be called a black-green. Per oz., 25c.

Sunlight

Sunlight—The flowers, of largest size, are most beautifully colored—clear, rich, golden yellow. Individual flowers measure nearly three inches across, and are produced most profusely. Per oz., 15c; ¼ lb., 40c; per lb., \$1.25.

Twilight

Twilight—(Burpee's)—The flowers are extra large and most pleasing in color, having a faint salmon or buff tint, heavily suffused with rosy salmon. Per oz., 20c; ¼ lb., 60c.

Moonlight

Moonlight—(Burpee's)—Exquisite light straw-yellow flowers of unusual size borne in great profusion. Per oz., 15c; ¼ lb., 40c; per lb., \$1.25.

Midnight

Midnight—Plants of extremely deep, dark-green foliage. Flowers are a deep brownish red, the soft velvety texture of the petals being crumpled or partially folded. Per oz., 20c; ¼ lb., 60c.

Tall Ivy-Leaved
Nasturtiums

The plants are of running growth, with star-like pointed leaves, of rich green, veined with white, so that the young shoots, where the leaves are set closely together, have a marked resemblance to the foliage of the hardy English Ivy. The flowers are of medium size and of most distinct form. The petals are quite narrow, and standing well apart from each other, present a striking star-like appearance.

Many Colors Mixed. Pkt., 10c; oz., 20c; ¼ lb., 60c.

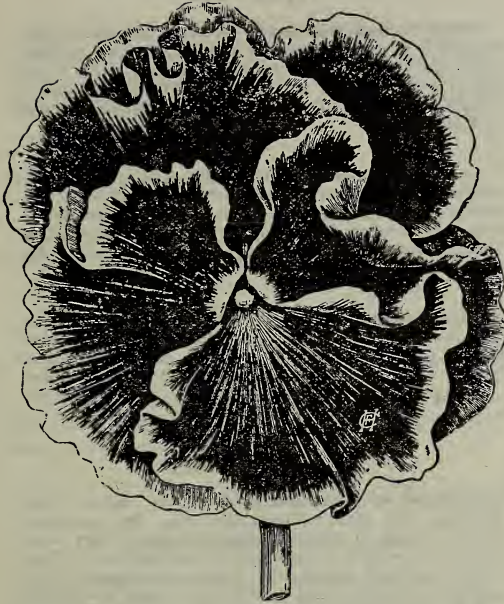
Butzer's Selected Strains of All the Best Dwarf-Growing
Tom Thumb Nasturtiums

These are of dwarf, compact, rounded growth. As with all Nasturtiums, they succeed best on light, well-drained soils or in slightly raised beds.

A "packet" of Nasturtiums contains from 30 to 45 seeds, an ounce contains from 175 to 225 seeds.

Mixed—This includes many showy colors, having both light and dark foliage in mixture. It will give a very wide range of flowers in beautiful colorings. Pkt., 5c; oz., 10c; 2 oz., 15c; ¼ lb., 25c; per lb., 85c, postpaid.

FLOWER SEEDS—Continued



Masterpiece—A remarkable type, the border of each petal being conspicuously curled or waved, giving the flower a doubled or globular appearance. All colors mixed. Pkt., 15c.

Bugnot's Superb Blotched—A beautiful class, with extra large flowers in great diversity of colors. Pkt., 15c.

English Finest Mixed— $\frac{1}{4}$ oz., 50c; pkt., 10c.

Good Mixed—All colors. $\frac{1}{4}$ oz., 25c; pkt., 5c.

Giant Trimardeau Pansies—The largest flowering of all; of strong, robust growth and well adapted to the trying conditions of our climate.

Snow Queen: Pure white.....Per pkt. 10c.

Victoria: Nearly scarlet.....Per pkt. 10c.

PETUNIA

The Petunia is without a peer among annuals for effective summer bedding or indoor culture. They are of easy culture, early to blossom and continue throughout the summer until the first killing frost. No other flower produces a great diversity of color, retaining their freshness for so long a period. The doubles may be perpetuated, if desired, by taking cuttings late in the summer, for winter house blooming plants. Provide good soil and a sunny location.

Fine Mixed—Excellent for bedding; many colors. $\frac{1}{4}$ oz., 25c; pkt., 10c.

Giants of California—The "Giants of California" bear gigantic flowers often five or more inches in diameter, of an astonishing variety of colors. They embrace every conceivable shade of crimson, pink, lavender, yellow, black, pure white, etc. One of the chief points of excellence is the deep throat and diversity of veining in the throat. Many of the flowers have a clear yellow throat, while others have a pure velvety black one, so deep that it seems to show no veining; many are deeply lined and netted on a white, pink or lavender ground. Many flowers are beautifully ruffled and frilled. Our strain is unexcelled, being saved especially for our critical trade by a leading Petunia specialist. Pkt., 25c.

PANSY

For spring plants the seed may be sown broadcast from July to September. Cover the seed very lightly with fine soil and press in with a board; then mulch the seed bed with long, loose, strawy manure, to a depth of 3 or 4 inches. The seed will be up in about 10 to 15 days; then remove the straw a little at a time. Transplant the seedlings to beds or frames in September or October and after a sharp frost, late in November or early in December, provide a light or loose mulch of hay, straw or litter. The seed may also be sown indoors in January or February; or in spring in the open ground, in a shady cool spot, where the plant can be protected from the strong mid-day sun. The soil should be very rich and liberal applications of bone meal should be given from time to time.

Imperial German—A mixture of Pansies, unrivalled for diversity of coloring and marking. This mixture is made up from over 100 of the finest named varieties grown by Pansy specialists of the Old and New World. In making up this mixture, expense is not regarded. Our aim is to possess the finest mixture of Pansies obtainable. We have never seen its equal. The diversity of coloring and marking is almost beyond belief. We will cheerfully return money paid for this mixture to any one who says it is not the finest they ever saw. Pkt., containing 100 seeds, 15c; 600 seeds 40c; 1,000 seeds, 60c.

Giant Fancy—While all the Pansies in our Imperial Mixture are large, we do not include in its make-up many of the giant sorts, for, as a rule, many of our customers prefer to buy them separately. Great improvement has taken place within the last two or three years, however, in the character of the largest Pansies. Our Giant Fancy is the finest mixture of the large varieties. Pkt., 10c; 100 seeds, 15c; 600 seeds, 35c.

	Pkt.
Atropurpurea : Dark blue.....	10c.
Azure Blue	10c.
Emperor William : Ultramarine blue.....	10c.
Fairy Queen : Blue with azure margin.....	10c.
Fire King : Crimson, yellow edge.....	10c.
Golden Gem : Pure yellow.....	10c.
Golden Yellow : Dark Eye.....	10c.
King of the Blacks or Faust : Velvety black.....	10c.
Lord Beaconsfield : Lavender, heliotrope and purple.....	10c.
Peacock : Peacock blue, white edge.....	10c.

PHLOX

Phlox Drummondii—Of all summer-flowering annuals the varieties of Phlox Drummondii are unquestionably some of the most brilliant and satisfactory. Seed may be sown in the open ground any time after danger of frost is past, and in a few weeks the beds or borders are aglow with their brilliant coloring and remain so until cut down by frost. For early flowering they should be started indoors or in a hotbed. Mixed colors. Oz., 50c; pkt., 5c.

Grandiflora Varieties—Large Flowering—The following six colors are considered the brightest, best and most distinct for bedding:

Pure White —Per pkt., 10c.
Shell Pink —Per pkt., 10c.
Deep Rose —Per pkt., 10c.
Crimson Beauty —Per pkt., 10c.
Royal Purple —Per pkt., 10c.
Blood Red —Per pkt., 10c.
Grandiflora —Choice Mixed—Oz., 75c; pkt., 10c.

Large Flowering Dwarf Varieties—A type combining the size of the individual flower and the head of the finest Grandifloras with the dwarf, compact growth of the dwarf sorts; altogether a perfect combination. Finest mixed colors. $\frac{1}{4}$ oz., 50c; pkt., 10c.

Star Phlox (Star of Quedlinburg)—Of dwarf habit with very pretty star-shaped flowers. A novel and beautiful variety. Mixed colors. Pkt., 10c.

FLOWER SEEDS—Continued

POPPIES

A great advance has been made in recent years in the development of the Poppy which has brought it into deserved popularity, and it may be safely said that no other flower produces a more brilliant display of color during the blooming period. Annual Poppies should be sown as early in the spring as possible where they are to remain, as they do not stand transplanting. If constant blossom is desired, successive sowings should be made every two weeks.

BUTZER'S SPECIAL MIXTURE OF SINGLE POPPIES

This mixture includes all the choice Poppies. It is really extra choice. Pkt., 10c; $\frac{1}{2}$ oz., 15c; oz., 25c; 2 ozs., 40c; $\frac{1}{4}$ lb., 70c.

BUTZER'S SPECIAL POPPY MIXTURE

Double and Single

Comprises not only all the Double and Single Poppies described, but also a number of other sorts specially purchased for this mixture, including some entirely new ones. Will make a grand display. Pkt. (500 seeds), 10c; 3 for 20c; $\frac{1}{2}$ oz., 20c; oz., 30c.

PINKS

Dianthus, or *Pinks*—Hardy annuals, about one foot high, and bearing beautifully colored, single and double blossoms in profusion all summer. Sow seed early in boxes and transplant, or sow in rows where the plants are to remain and thin.

Diademat Fl. Pl. Double *Diadem Pink*—Large double flowers, in many colors. Pkt., 5c.

Heddewigi (Japanese Pink)—Finest single mixed. Pkt., 5c; finest double, mixed, pkt., 5c.

Laciniatus—Single, fringed varieties. Pkt., 5c.

Mixture of all single varieties. Pkt., 5c; oz., 50c.

Hardy Perennials, or *Clove Pinks*—(*Plumarius*). Scotch or Grass Pink. When treated like an annual, if seed is sown in March, the plants will bloom the first year. The delicately fringed, variously colored flowers are fragrant, attractive and fine for bouquets. Pkt., 5c.

Plumarius, Fl. Pleno—Double, large-flowering *Phasant's Eye Pink*, with fringed edges of various colors, mixed. Pkt., 10c.



SALPIGLOSSIS

Salpiglossis.—A half-hardy annual, growing about three feet high and bearing trumpet shaped blossoms of rich shades and colors, all beautifully veined. It is valuable for bedding and massing, and its long stems make it excellent also for cut flowers. Sow seed early in the year and transplant, or sow the seed where it is to remain, in April, and thin to six or eight inches, enrich the soil. Mixed, Pkt., 5c.

SALVIA

Salvia or *Flowering Sage*.—A tender perennial blooming the first season from seed and growing two to three feet high. The blossoms are borne on long stems in racemes or spikes, and are fragrant. The plant forms a bunch and blooms profusely during the whole summer and fall.

Salvia Splendens (Scarlet Sage)—One of the handsomest flowering plants we have for garden decoration. Excellent for filling large beds or borders in the garden; continuously in bloom from early August until the first killing frost. Beautiful scarlet; large flowering. $\frac{1}{4}$ oz., 50c pkt., 5c.

Clara Bedman (Bonfire)—The plants form handsome, globular bushes about two feet in diameter. The spikes grow upright and stand clear above the foliage, completely enveloping the plant, and are of a most brilliant, dazzling scarlet. Pkt., 10c.

SCABIOSA

Scabiosa or *Mourning Bride*.—Also called *Sweet Scabious*, *Old Maid's Pincushion*, etc. Our mammoth flowered strain of this old-fashioned flower is very beautiful and worthy of a place in every garden; the tall flowers are especially adapted for cutting and massing in the garden. Annual $2\frac{1}{2}$ to 4 feet high. These new flowers are double clear to the center, covering the thimble-shaped cone. Pkt., 5c.

ZINNIAS

Zinnias—(Youth and Old Age)—Is one of the most brilliant and showy of annuals, and has long been a general favorite. The seed can be sown early in the hotbed and transplanted; or sown later in the open ground. They come in flower early in the summer, and keep on blooming until hard frost; require little attention and succeed almost anywhere. For perfection of blossom start the seeds in March and prick out once or twice before transferring to the open border in May or June. Provide the plants with plenty of room, at least 18 inches apart each way, and they soon completely cover the ground.

Tall Giant, Double Mixed—Elegant strain, comprising all the choicest colors and producing very large, double flowers; $2\frac{1}{2}$ feet. Pkt., 5c; $\frac{1}{4}$ oz., 20c.

Dwarf Double Mixed—Fine for edgings, growing $1\frac{1}{2}$ feet high, and producing very large, double flowers. Pkt., 5c; $\frac{1}{4}$ oz., 20c.

STOCKS

Stocks (Gilliflower)—The Stock is one of the most popular annuals, either for bedding or pot culture; for brilliancy and diversity of color, fragrance, profusion and duration of bloom it is unsurpassed. Start the seed in February and March, and as soon as the plants have their second pair of leaves, prick out into shallow boxes and in about four weeks the plants will be ready to pot; from which they should be transferred to the open ground in May or June.

Large Flowering Ten-Weeks Stock—This is the leading class for bedding out or summer blooming.

Blood Red—Per pkt., 10c.

Bright Pink—Per pkt., 10c.

Mixed Colors—Per pkt., 5c.

Purple—Per pkt., 10c.

Pure White—Per pkt., 10c.

Light Blue—Per pkt., 10c.

Canary Yellow—Per pkt., 10c.

FLOWER SEEDS—Continued

SWEET WILLIAMS

Sweet Williams (*Dianthus Barbatus*)—A well-known attractive, free-flowering, hardy perennial, producing a splendid effect in beds and borders, with rich and varied flowers. The demand for separate colors has induced us to offer this season several of the best and most distinct flowering sorts.

Single White—Per pkt., 5c.

Single Crimson—Per pkt., 5c.

Single Scarlet—Per pkt., 5c.

Single Velvety Black maroon—Per pkt., 5c.

Red—With white eye. Per pkt., 5c.

Single Violet—With white eye. Per pkt., 5c.

Single Mixed—All colors. Oz., 25c; pkt., 5c.

Double Mixed— $\frac{1}{4}$ oz., 25c; pkt., 5c.

VERBENAS

Verbenas—Are free-flowering hardy annuals of low, spreading growth. Single plants in rich soil will cover a space three to four feet in diameter and furnish a profusion of flowers. If the flowers are kept cut, the plants will bloom much more freely. Plants grown from seed are not only cheaper than those grown from cuttings, but are more vigorous.

Mammoth Strain—This is without doubt the finest strain in existence. White, Scarlet, Rose, Purple, Striped or Finest Mixed. Pkt., 10c; $\frac{1}{4}$ oz., \$1.00.

Fine Mixed—Pkt., 5c; $\frac{1}{4}$ oz., 30c.

WALL FLOWER

Wallflower—Very highly prized, old-fashioned plants, grown largely for their fragrance; half-hardy perennial varieties; $1\frac{1}{2}$ feet.

Single Finest Mixed—Pkt., 5c; $\frac{1}{4}$ oz., 15c.

Double Tall Branching, Finest Mixed—Fragrant 3 feet. Pkt., 10c; $\frac{1}{4}$ oz., 25c.

SEEDS OF ANNUAL CLIMBERS

Canary-Bird Flower

Canary-Bird Flower—This is one of the most beautiful of climbers, with handsomely fringed rich yellow flowers and delicate foliage. Pkt., 5c; oz., 20c.

Wild Cucumber Vine

Wild Cucumber Vine—Most rapid growing and free flowering. The vines attain a great height; they begin to bloom early, and by midsummer are covered with large sprays of panicles of small white flowers. Pkt., 5c; oz., 20c.

Imperial Japanese Morning Glories

Imperial Japanese Morning Glories—The flowers are of extra large size and most distinct colorings, while the foliage is also wonderfully varied and attractive. The large leaves come in many distinct shapes; some are heavily marbled with white or golden yellow. Of many colors and varied markings the flowers range from deep rich purple to pure silvery white. The vines are not so hardy nor such vigorous climbers as the other Morning Glories offered above. Choice Mixed. Pkt., 5c; oz., 20c.

Cypress Vine

Cypress Vine—Delicate fern-like foliage and beautiful star-shaped flowers.

Scarlet—Intensely rich scarlet. Pkt., 5c.

White—Purest paper white. Pkt., 5c.

Mixed—Pkt., 5c; oz., 25c.

Scarlet Ivy-Leaved—Entirely distinct from the above, both in flowers and foliage. The deeply lobed ivy-like leaves make a dense screen, from which the great fork-like racemes of fiery orange-scarlet flowers stand in countless numbers. Pkt., 5c; oz., 25c.

Morning Glories

For covering trellises and fences, which otherwise would be bare and unsightly, no climber is more justly popular than the Morning Glory. The vines grow quickly to a length or height of fifteen feet and bear profusely funnel-shaped flowers of both brilliant and soft delicate colors. The seed is so cheap, and success so sure everywhere, that (like Nasturtiums) the seed should be bought by the ounce and planted liberally.

Fine Mixed—Many colors. Pkt., 5c; oz., 10c; $\frac{1}{4}$ lb., 30c.

Moonflower

Moonflower—These beautiful climbers grow rapidly, and will reach a height of twenty to thirty feet in a single season. The foliage is large, dense, and luxuriant, affording splendid shade for porches. Plant seed half an inch deep in rich soil in early spring when trees are well out in leaf. For Northern States, seed should be started indoors early in March, and setting vines outdoors when trees are out in leaf.

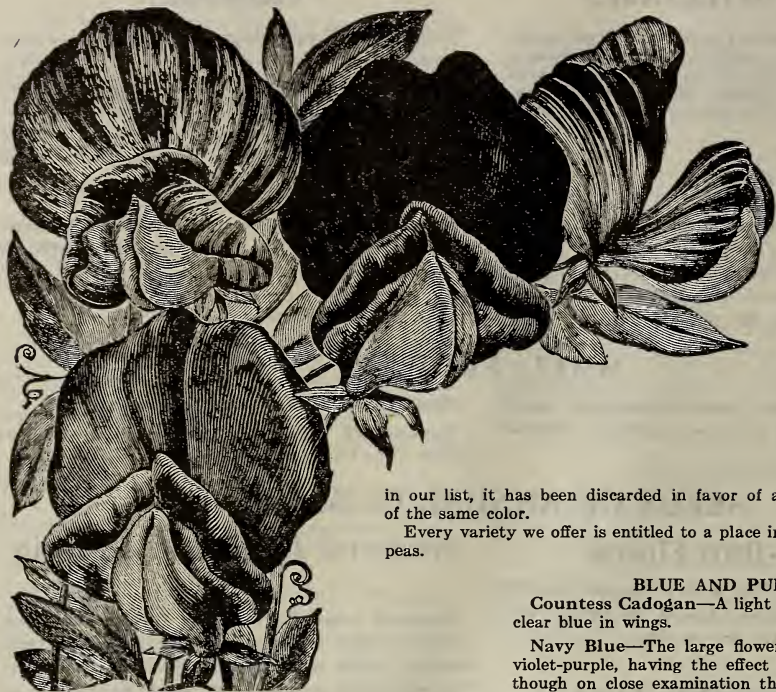
Moonflower, White-Seeded—The vines are almost covered with thousands of immense white flowers, many measuring six inches across. Pkt., 10c.

Moonflower, "Sky-Blue"—Of strong vigorous growth, the plants quickly attain twelve to fifteen feet in height. A dense mass of large heart-shaped leaves forms a most appropriate setting for the large sky-blue flowers, which come in September. The flowers measure nearly four inches across and are surpassingly beautiful—of the softest coerulean blue, shading to white at the throat. Pkt., 10c.

Coboea Scandens

Coboea Scandens—Of rapid growth, with fine foliage. Large bell-shaped flowers of a beautiful violet hue. Pkt 5c; oz., 35c.

Butzer's Select Standard Sweet Peas



There are now in commerce, including the New Orchid-flowered type, about 300 varieties of sweet peas, with new sorts being added every year. Many of this vast number are either small-flowering, of weakly growth or lacking in some characteristic which a first-class variety should have. Every year our list is carefully revised, with a view to keeping it strictly up-to-date; and while it seems hard to dispense with some of the once popular kinds, yet it must be done to keep up with the march of progress, and if you miss some old favorite

in our list, it has been discarded in favor of a new and improved sort of the same color.

Every variety we offer is entitled to a place in the front rank of sweet peas.

Except where otherwise priced, varieties in following list are all at the uniform price of 5c per pkt.; 7 pkts., 25c; 10c per ounce.

A regular five-cent "packet" generally contains from seventy to ninety seeds, while an ounce contains from 300 to 360 seeds, varying according to size of seed.

WHITE.

Dorothy Eckford—The grand pure white flowers are beautifully shell-shaped, of extra large size, and borne three on a stem. It is very robust in growth, and the vines produce an enormous mass of bloom.

CREAM, OR LIGHT YELLOW.

Mrs. Collier—Beautiful rich primrose self-color, entirely free from any suggestion of pink; flowers very large, semi-hooded, borne three and four on long stiff stems. Mrs. Collier is the finest Primrose Sweet Pea; the latest and best of the type.

LIGHT PINK.

Katherine Tracy—Soft rosy pink, lighter at edges. A fine large flower, but only two on a stem.

Lovely—Beautiful shades of soft shell-pink, changing to very light rose at the outer edges.

Prima Donna—A most beautiful bright shade of pure pink. Flowers of large size and finest form.

DEEPER PINK.

Janet Scott—This might almost be called a new shade of rich pink. The unusual size of the wings, with the large substantial hooded standard, give the flowers an appearance of enormous size; they are generally borne three on a stem.

CRIMSON AND SCARLET.

King Edward VII, "The Modern Firefly"—The large flowers of open form are almost self-colored; standard is of a bright crimson-scarlet, wings of same shade of color, only not so bright. The stems are long and invariably carry three fine flowers.

BLUE AND PURPLE.

Countess Cadogan—A light bluish purple in standard; clear blue in wings.

Navy Blue—The large flowers are of a deep glowing violet-purple, having the effect of a dark navy blue, although on close examination the standards show a faint tinge of claret or wine-red.

CLARET AND MAROON

Othello—A deep maroon self-color.

PINK AND WHITE, BI-COLOR.

Burpee's Earliest of All—Flowers fully ten days in advance of Extra Early Blanche Ferry, bearing a profusion of the beautifully tinted flowers. Standard bright rosy pink; wings creamy white, suffused light rose. Planted under glass in September the vines begin to bloom in November.

STRIPED AND MOTTLED.

America—Heavily striped with bright blood-red on silvery-white ground.

Aurora—Both standard and wings beautifully flaked with bright orange-salmon on a creamy-white background.

Helen Pierce—The color is very bright blue, mottled on pure white. It does not show any suggestion of stripe, but is uniformly marbled or mottled. Of good size and perfect shell shape.

LAVENDER AND LIGHT BLUE.

Flora Norton—This is a beautiful rich lavender, entirely free from any pinkish tinge—almost "a bright blue."

ORANGE AND SALMON.

Lady Mary Currie—Standard heavily veined with salmon pink and shaded with carmine; wings of a soft rose-pink, veined with a deeper shade.

Miss Willmott—Beautiful large flowers; the standard is of rich orange-pink, delicately shaded rose; wings also orange-pink.

PICOTEE EDGED.

Lottie Eckford—Large silvery-white flowers, beautifully shaded and edged with soft lavender.

Butzer's Rose City Mixed Sweet Peas—The finest mixture. The acme of richness and beauty, matchless in combinations of colors and giant sweet-scented flowers. It is made up regardless of expense, the aim being to secure in this combination the largest flowering sorts and finest possible range of colors. Pkt., 5c; oz., 10c.

SWEET PEAS



THE "SPENCER" TYPE OF SWEET PEAS

Sweet Peas of the Spencer Type—The introduction of this type has created new interest and added to the popularity of sweet peas. They are quite distinct from standard sorts, having large, round, open flowers of extraordinary size, usually measuring two inches across, with many standards and wide-spreading wings, a very large percentage bearing four of these immense blossoms to the stem, which is long and strong, making them of exceptional value for cutting. To sum up, they possess every characteristic that can be desired in sweet peas, excepting that they are heavy seeders, on which account the seed will remain high in price.

America Spencer—In brilliancy of color this is almost an exact duplicate of the popular *Grandiflora* Sweet Pea, America—but "ennobled" to the true giant waved Spencer type. The ground color is ivory-white, distinctly striped with brilliant crimson-red. The flowers are borne three and four on long stiff stems, and hold their color well till near the end of the season. Pkt., 10c; oz., 45c.

Asta Ohn—The flowers are of large size, pronouncedly fluted in the standard, with unusually large, thoroughly waved wings. The stems are particularly long and sturdy and each stem uniformly bears four flowers. The color is a charming soft lavender, suffused with mauve. It comes remarkably true from seed. Pkt., 10c; oz., 30c, postpaid.

Apple Blossom Spencer—This is a reproduction of the long-time popular Apple Blossom Sweet Pea, but of enlarged size and true Spencer type. The form is most beautiful; the petals are waved and crinkled to a remarkable degree with distinct serrations on edges of standard. The flowers are most attractive and bunch well. Like the original Apple Blossom, some flowers are deeper in color than others on the same vine. The vine is thrifty and the large handsome flowers are borne upon long, strong stems. Packets containing 20 seeds each, 10c; oz., 30c.

Countess Spencer—The coloring is a soft rose pink, which deepens at the outer edges and becomes still richer or more heavily suffused in cool weather. The large flowers

are borne three and four upon long stiff stems. Our true "Re-selected" strain has no superior. Pkt. (50 to 60 seeds), 10c; oz., 25c.

Elfrida Pearson—The flowers are of extra large size, great substance and lasting quality when cut. They are nicely disposed on extremely long stiff stems, invariably borne in fours. The vines bloom in wonderful profusion, and are of such vigorous growth that the flowers frequently come with double standards. The color is a lovely pink throughout, the buds and flowers being tinted with salmon pink. It is easily one of the best half-dozen in cultivation today. Received a Certificate of Merit from the Royal Horticultural Society. Crop quite short. Per pkt. (30 to 40 seeds), 15c; ¼ oz., 30c; ½ oz., 50c; oz., 90c.

Ethel Roosevelt—This is a true waved variety of the largest and most perfect Spencer type. The ground color is a soft pleasing primrose, or straw color, overlaid with dainty flakes and splashes of blush-crimson. The crimson is not at all pronounced and simply gives some warmth and golden tinting to the yellowish groundwork. It bunches splendidly and will easily lead in this type of coloring for a long time. Pkt. (30 to 40 seeds), 10c; oz., 30c.

Flora Norton Spencer—While the flowers are smaller than other "Spencers," the beautiful tone of color entitles it to a place. They are precisely the same shade of rich lavender as is seen in the *grandiflora* variety of the same name. Pkt. 10c; oz., 35c.

SWEET PEAS—Continued.

“SPENCER TYPE”

Florence Nightingale—As claimed last year this has proved to be the largest and best Lavender Spencer yet introduced! The standard is usually large and bold, pronouncedly waved, yet standing erect and broad—frequently measuring two inches across. The color is of a most charmingly soft clear rich lavender, which is enlivened by a very faint sheen of rose-pink. The large well-spread wings are of the same coloring, frilled and well waved. It is practically a self-color and bunches beautifully—attracting universal admiration. The vines are extremely robust in growth, flowering most profusely. The stout stems measure twelve to sixteen inches in length and a large proportion bear four well placed flowers. Florence Nightingale comes entirely true from seed—both as to color and the highest ideal Spencer type. Pkt. 10c; oz., 25c.

King Edward Spencer—The standard measures from one and three-quarters to two inches across by one and one-quarter inches deep. The unusually large wings make the flowers appear truly gigantic in size. The standard is a deep rich armine-scarlet of glossy effect. The wings are also carmine-scarlet and on the reverse side are of a deep rosy carmine. The long stiff stems frequently carry four fine blooms. Pkt. 10c; oz., 25c.

Maud Holmes Spencer—A brilliant sun-proof crimson of the largest size. Of true Spencer form, wavy and fluted. Pkt., 10c; $\frac{1}{2}$ oz., 20c; 1 oz., 35c.

Mrs. Routzahn—Buff or apricot ground, flushed and suffused with delicate pink, deepening toward the edges. The flowers are of the largest size—thoroughly crimped and waved. The standard is broad and deep; the wavy wings are so large that they usually hide the keel. Pkt. 10c; $\frac{1}{2}$ oz., 25c.

Othello Spencer—This beautiful new Sweet Pea is decidedly the best of all dark Spencers—far superior to the English Black Knight Spencer. The flowers are beautifully waved or crinkled both in standard and wings. The long stems are thick and carry well either three or four fine blo ms of a rich deep maroon. It is a strong grower and flowers most profusely. Pkt. 10c; oz., 35c.

Primrose Spencer—The waved standard measures nearly two inches across; the crinkled wings are an inch across by one and one-eighth inches deep. The color is a pronounced primrose throughout both standard and wings. Pkt. 10c; oz., 25c.

Purple Prince Spencer—This beautiful novelty makes a most effective bunch in bouquets. The flowers, frequently fours, borne on very long stems and well placed, are of large size—elegantly crimped and waved on both standard and wings. In the young stage they are distinctly bi-color, the standard being deep burnished purple-maroon, and the wings rosy purple. As the flowers develop with age the maroon color in standard passes off, leaving the entire flower almost a rosy-purple self. The profusion of bloom is constant and long continued. Pkt. 10c; oz., 35c.

White Spencer—Produces in the greatest profusion pure white waved flowers of truly gigantic size. The standard measures from one and three-quarters to two inches across. The flowers are borne three and four to the stem; the stems are extra strong and twelve inches in length. The vines attain a height of eight to ten feet and are almost completely covered with bloom, while the flowers retain their large size throughout the season. As now “Re-selected,” this is the largest and most beautiful of all white Sweet Peas! Pkt. (40 to 50 seeds), 10c; oz., 25c.

BUTZER'S SUPERB SPENCER MIXTURE

ALL WAVED OR SPENCER VARIETIES.

This mixture is made up from our carefully prepared formula and it contains practically all of the true Spencer varieties introduced to date, and it contains only the large Spencer types and all in well balanced, finely proportioned colors.

We do not think it possible for any one in the world to make up a better mixture of Sweet Peas than Butzer's Superb Mixed. Pkt., 10c; oz., 25c.

Sweet Pea Collections

I shall again sell the world famous Sweet Pea collections put up in their original packages by W. Atlee Burpee & Co., Philadelphia, Pa. Here they are: there is nothing better.

COLLECTIONS

Burpee's Six “Superb Spencers” for 25 Cents

Dainty Spencer (Burpee's) — Pure white, edged rose-pink.

Irish Belle (Burpee's) — Clear rich lilac, flushed pink.

King Edward Spencer (Burpee's) — A magnificent rich crimson.

Mrs. Cuthbertson — Clear rose-pink and white.

Mrs. Hugh Dickson — Rich pinkish apricot and cream.

Burpee-Blend for 1915.

25 cents buys all the above, in regular ten-cent packets containing 40 to 50 seeds each, except the Burpee-Blend for 1915.

Burpee's Six “Standard Spencers” for 25 Cents

America Spencer — Pure white, striped crimson-red.

Captivation Spencer (Burpee's) — Deep rosy wine-red self.

Decorator (Burpee's) — Rich rose, suffused terra-cotta.

Ethel Roosevelt (Burpee's) — Primrose, flaked rose.

Helen Lewis — Bright crimson-orange.

Queen Victoria Spencer (Burpee's) — Beautiful primrose, flushed rose.

25 cents buys all the above, in regular ten-cent packets containing 40 to 50 seeds each.

For 50 cents we will mail both collections named above and also a fifteen-cent packet of Illuminator, our great novelty of last year.

Five of the Finest “Burpee-Spencers” for 50 Cents

King White (Burpee's) — The greatest novelty of 1914. Pure white.

Mrs. Routzahn (Burpee's) — Rich buff, suffused delicate pink.

Orchid (Burpee's) — Beautiful helio-mauve.

Vermillion Brilliant (Burpee's) — The most brilliant scarlet Spencer.

Wedgwood (Burpee's) — A lovely shade of light blue.

50 cents buys one regular retail packet each of the above “Five of the Finest.” Purchased separately these five packets would cost eighty cents.

POULTRY SUPPLIES

CHICK FEED

For chicks this mixture embraces the best combination of seeds, grains, etc., that can be compounded for the purpose required. It gives the chicks quick growth and tends to keep them in good health. To properly develop the chick, either for market or to become a producer of eggs, it must be fed such food as will promote growth quickly and uniformly. A well-balanced feed will produce a well-balanced hen. This mixture is composed of ten different grains and seeds blended in the proper proportions, sound, clean and sweet. Price: 50-lb. sack, \$1.50; 100-lb. sack, \$2.75.

Write for price on large lots.

SCRATCH FOOD

Scratch Food—A combination as perfect as can be made from grain alone, there being no shell, grit, beef scraps or bone in its composition. Those who have used this feed declare it to be superior in all respects to other grain feeds on the market. Price: 100-lb. sack, \$2.25.

OYSTER SHELLS

Ground Oyster Shells—All breeders of poultry recognize the fact that a grit of some kind is a necessity, even where the fowls range, strength and plumpness are gained by providing them with Crushed Oyster Shells.

The most frequent cause of hens not laying is the absence in the food of Carbonate of Lime. As Crushed Oyster Shells is practically pure Carbonate of Lime, it supplies, when fed to poultry, this most essential element, and greatly aids in the formation of the egg.

It acts as a grit, prevents cholera and keeps the poultry healthy. It makes hens lay an egg per day and prevents soft shells.

It makes the egg shell strong enough to carry without breaking.

It contains many essential components of the egg and makes them larger and heavier.

They are crushed and screened by patented machinery into sizes which expert poultry raisers have advised us to adopt.

Every poultry house or yard should have a pan or trough, so that the fowls can have access to them at all times. Price, 100 lbs., \$1.00.

GRANULATED BONE

Granulated Bone—Made from fresh, green bones, which have the moisture, grease, etc., extracted from them leaving nothing but phosphate of lime and protein. Will keep in any kind of weather if kept dry. This bone is prepared especially for our trade. 100-lb. sack, \$1.75.

BONE MEAL

Bone Meal—Made from fresh bone, ground very fine, and is used to mix with the mash. Laying hens and young chicks with weak digestive powers are much benefited by this. Price: 10 lbs., 35c; 100 lbs., \$1.75.

BLOOD MEAL

Blood Meal—Each two ounces represents one quart of raw blood. This is an ideal food to bring winter eggs, and is very popular. A little goes a long ways. 10 lbs., 60c; 100 lbs., \$3.75.

BEEF SCRAPS

Beef Scraps—These are the very best the market affords. It is the best thing we know of to cause hens to lay during the winter. Feed three times a week, using about a handful to each three birds in the hot morning mash. Price: 25 lbs., \$1.00; 100 lbs., \$4.00.

ALFALFA MEAL

Alfalfa Meal—Made from green kiln-dried Alfalfa hay. This is from two to three times more valuable than clover meal and is highly recommended by prominent and successful poultry men. It contains a large per cent of protein and furnishes green feed in winter and at seasons when green food is unobtainable. A good inducement for hens to lay eggs. \$1.10 per 100-lb. sack.

Russian Sunflower Seed—Usually fed as a variety and is much relished by all kinds of poultry. Price: 5 lbs., 40c; 100 lbs., \$7.00.

LINSEED MEAL

Linseed Meal—If you desire a rich, glossy plumage, a little of this meal occasionally, mixed with soft feed, will prove of a great benefit. Write for Price.

TOBACCO DUST

Tobacco Dust—For use in dust baths and nest. A cheap and effective exterminator of lice. Price: Per lb., 10c, by mail postpaid, 25c.

Sundry Grains for Poultry and Pigeons—We will furnish prices upon application for any of the following:

Wheat, Crushed Wheat, Vetches, Millet, Kaffir Corn, Buckwheat, Oatmeal, Barley, Rye, Rape, Oats, Flaxseed, Corn.

CHARCOAL

Charcoal—Our Charcoal is prepared especially for poultry. It is granulated and free from dust. A good thing for bowel trouble, sour crop and indigestion; a health preserver. Two sizes, chick and hen. Prices: 1 lb., 10c; 10 lbs., 75c; 100 lbs., \$3.00.

GRIT

Grit—Every poultry raiser should keep a supply of this grit in each pen. All fowls must have hard, sharp grit of some kind with which to grind their food after it passes into the gizzard, otherwise they will not do well. Hundreds of young chicks die annually from no other cause than want of good grit. Made in two sizes, chick and hen size. We always send hen's sizes unless otherwise ordered. Price per 100 lbs., 75c.

BIRD SEED

Not for Planting. Special Prices in Quantity.

Best Mixed—Per lb., postpaid, 20c.

Canary—Best re-cleaned. Per lb., postpaid, 20c.

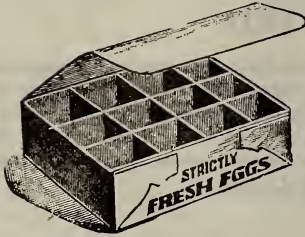
Hemp—Per lb., postpaid, 20c.

Millet—Per lb., postpaid, 20c.

Rape—Per lb., postpaid, 20c.

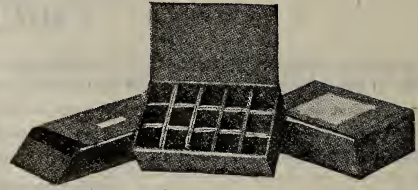
Cuttle Bone—Large bone. Postpaid, 2 for 5c.

POULTRY SUPPLIES—Continued

Ideal
Egg
Box

This is an ideal box for handling retail egg trade, presenting the goods to the customer in an attractive package with the minimum amount of trouble for the seller. They knock down in a very compact shape, and the prices which we name are extremely reasonable. One dozen size, 25 for 25c; per 100, 75c; \$1.00 per 100, postpaid.

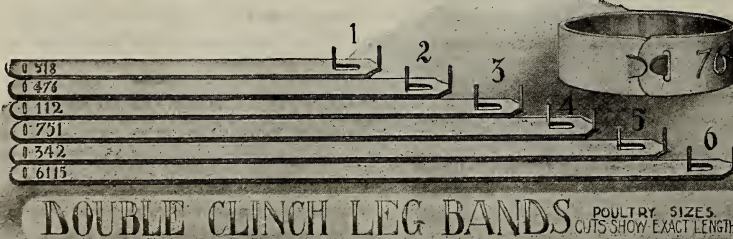
Lice Killing Nest Egg—A combined nest egg and lice killer. By simply using it in the nests in the same manner as an ordinary nest egg is used, laying hens are cleared of lice and mites and are able to occupy the nests with comfort. Do not accept the worthless substitutes. Price, each, 10c; postpaid; per doz., 75c; postpaid, \$1.00.



ANDERSON'S FOLDING EGG BOXES.

Anderson's Folding Egg Boxes—Made of heavy corrugated paper. The greatest advantage in it is that they can be bought K. D. (in the flat), and the express or freight will be about one-sixth of what it has been on the old style boxes. Only a few seconds' work to set the box up, pack it with eggs, and address it. These boxes are light, but very strong, being firmly braced, and will stand the weight of several hundred pounds without crushing. 15-Egg size, 15c each; 6, 80c; doz., \$1.50. Sample box No. 3, postpaid, for 25c.

Porcelain Nest-Eggs—These are the finest quality nest-eggs. Nothing equals them to induce pullets when first commencing to lay to use the nest. Price, per doz., 25c; postpaid, 45c.



Double Clinch—A great favorite, made in six sizes for poultry and two sizes for pigeons. Prices: 12, 15c; 25, 25c; 50, 40c; 100, 65c; 250, \$1.50; 500, \$2.75; 1000, \$5.25.

Leader Adjustable—Smoothest and most secure fastening ever invented. Prices: 12, 15c; 25, 25c; 50, 40c; 100, 65c; 250, \$1.50; 500, \$2.75; 1000, \$5.25. Made in two sizes. No. 1 for Bantams and Mediterraneans, and No. 2 for all larger breeds and turkeys.

GALVANIZED IRON DRINKING FOUNTAINS

Our Galvanized Iron Drinking Fountains embody every good feature of the down-to-date drinking fountains and, we believe, are the best in use. They are easily filled, cleaned and kept clean. If placed in the shade in summer time, the water will keep nearly as cool as in an earthen vessel. They are much lighter than the earthenware fountains and are safer to ship. We offer them very cheap.

Small size.....Each, 30 cts.; six, \$1.70
Medium size.....Each, 40 cts.; six, 2.25
Large size.....Each, 50 cts.; six, 2.75

SANITARY STONE FOUNTAINS.

These are strong and well finished, made in two pieces and easily washed and kept clean. They probably keep the water cooler than the galvanized fountains, but are heavier to handle and more liable to break. Price, ½ gal., 35c; 1 gal., 50c.

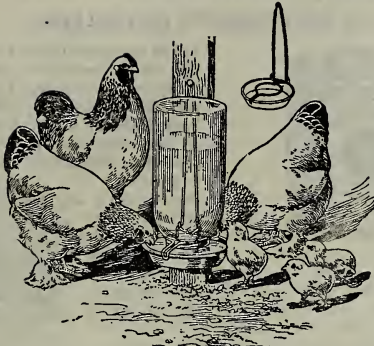
GALVANIZED WALL FOUNTAINS.

Something new and serviceable. To be hung on the wall or against an upright post, at any height. The hood over the trough protects the water from becoming soiled. Anyone can easily see the convenience of these. One gal. size, each, 75c.



ZENOLEUM—Lice Killer Disinfectant—Animal Dip

POULTRY SUPPLIES—Continued



THE "ALL-RITE" Sanitary Fountain and Feeder

Patent Pending

Clean, pure water is life to the chicks. Foul, dirty

Poultry and Stock Foods, Remedies, Etc.

When you order goods by freight, add a package or two of these remedies; the charges will be no more, and you will have them on hand when needed. Full directions on each package. Remember, not postpaid at following prices, unless so stated.

PRATTS POULTRY REGULATOR. (Formerly called Pratts Poultry Food.)



This is the original Poultry Regulator, in use by the most successful poultry raisers everywhere.

It is entirely different from Pratt's Animal Regulator. It is composed of valuable imported roots, herbs and barks so blended as to make a perfect regulator, tonic and stimulant, suited to the constitution of the poultry.

Pratts Poultry Regulator overcomes the difficulties met by every poultryman by regulating the blood, bowels and digestive organs of all fowls. Thus it keeps the birds in robust health, produces good, rich blood, healthy fat, sturdy muscles, strong bones, red combs and wattles, brilliant feathers and fertile eggs. It stands unrivaled as an egg-producer, and when regularly used the hens lay throughout the year.

It prevents diseases and cures chicken cholera, gapes, rump, rheumatism, expels worms, prevents leg weakness, egg-eating and unnatural habits. It will also greatly improve turkey, geese, ducks, pigeons and guineas—making them grow bigger and quicker.

Pratts Poultry Regulator costs but a few cents a week for a big flock, and it pays its cost many times over in the results it produces. Results are immediate and permanent.

Be sure to ask for Pratt's Poultry Regulator, made by "Pratt Food Co."—the original and best Poultry Regulator in America. Do not accept substitutes or imitation preparations. Price: 26-oz. pkg., 25c; 5-lb. pkg., 60c; also \$1.25 and \$2.50 packages.

PRATTS ROUP CURE.



Is a scientific preparation compounded into a fine powder, and, when mixed with water is absorbed by the blood at once, purifying the system, allaying inflammation and reducing the fever. A 25c box makes 15 gallons of roup medicine, and a 50c box makes 38 gallons. Its cost is so reasonable that no poultryman can afford to be without it. It not only cures, but prevents roup, colds, canker, catarrh and diphtheria, and should be given to all fowls frequently to keep disease away. Where it is used sickness is unknown. Remember, a

roupy hen never lays.

Pratts Roup Cure is quite different from many so-called roup cures, which may cure a cold, but never a genuine

or stale water is sure death. Which are your chicks getting? Which would you rather have them drink?

The "All-Rite" Sanitary Fountain and Feeder, is designed especially to furnish the chicks with water that will make them thrive—that will keep them healthy—that will develop them quickly.

The "All-Rite" is hung up out of the dirt and litter. Chicks cannot possibly foul it, they cannot get into it to get wet, they cannot get any dirt into it. It is simple and automatic in action. It cannot clog.

It feeds water or grit, grain, mixed chick feed, etc. It is easy to fill. Simply snap out the bottom part, fill the jar, snap the bottom part on again and invert. There is no need of removing the jar from the wire holder. It is the easiest fountain and feeder to clean. There are no corners, nooks or cracks, for dirt to lodge. It is strong and substantially made and folds up compactly for shipment.

Made with wire holders, for the old zinc-top Ball Mason Jar. Holds a quart or two quart jar. Prices 15c each, two for 25c. Postage 7c each extra. Weight 3 3/4 pounds per dozen. We do not include cans or jars with the "All-Rite." A two-quart fountain holds sufficient water, grit or grain for twelve or fifteen hens.

Increase your profits by saving the chicks. Start now by ordering the "All-Rite" Sanitary Fountain and Feeder.

case of roup. Price, 25c and 50c a box. Order today. One box may save you hundreds of dollars.

PRATTS ANIMAL REGULATOR. The Admitted Grain Saver.



This is the original and pioneer stock regulator of America. It is used daily in over 50,000 towns throughout the United States and Canada, and sold in every country in the world. Veterinary surgeons, professional breeders and scientific farmers everywhere require and urge its use. For over 40 years it has been recognized as the most reliable and most effectual Regulator and Tonic for all domestic animals.

Practically all stock today are forced to their limit, and as this is an unnatural condition, differing from their ordinary wild life, it is necessary to treat them so as to make up for this added strain and to give them health, strength, and to make them profitable. That is exactly the mission of Pratt's Animal Regulator.

Pratts Animal Regulator is a regulator, digestive and mild tonic. The ingredients consist of pure medicinal roots, herbs and barks, carefully blended in the exact proportions necessary to gently but surely act on the blood, bowels, liver and digestive organs of cows, sheep and hogs. It causes perfect digestion.

Ordinarily a great quantity of food given to stock is wasted on account of imperfect assimilation. Pratt's Animal Regulator stops that at once. The worst run-down animal can be given Pratt's Animal Regulator according to directions, and an improvement will be seen almost at once.

Horses are kept well and strong, their wind improved, and their coat will be sleek and glossy.

Cows give more and richer milk, the percentage of butter fat being always increased, and their calves are strong and healthy. Steers fatten in half the time.

Hogs are raised and fattened quickly and kept free from disease. Sheep are kept healthy, and their meat and wool improved by its use. Price, 25-lb. pails, \$3.50; also 25c and 50c pkgs.



PRATTS CHOLERA REMEDY.

Cholera can be quickly cured by the use of Pratt's Cholera Remedy; satisfaction guaranteed or money refunded. Also invaluable for sour crop, indigestion and bowel troubles. Price, 25c and 50c. Mailed postpaid on receipt of price.

POULTRY AND STOCK FOODS, REMEDIES, ETC.

PRATTS HEAVE, COUGH AND COLD CURE.



Is a positive remedy for heaves, coughs, colds and catarrh. A single day's treatment helps the worst case of heaves. Several doses show a vast improvement, and in a few days the cough will stop and the breathing be natural. It tones up the lungs and digestive organs, strengthens and soothes the nerves, and purifies the blood.

It cures coughs and colds by strengthening the digestive and respiratory organs, loosens the phlegm in the throat and counter-

acts the inflammation and irritation. A "heavy" horse is worthless. Pratt's Heave Cure makes him valuable. Sold in 50c and \$1.00 packages.

PRATTS LIQUID LICE KILLER.



Is the strongest liquid preparation on the market for the destruction of poultry lice and lice on horses, cattle, cows and hogs; ticks on sheep, and fleas on cats and dogs. It is invaluable for household use, for cleaning and disinfecting drains, sinks, slop pails, cellars, stables and outhouses.

Pratts Liquid Lice Killer is not only the surest, quickest and most effective, but also the cheapest. Sold in 35c, 60c and \$1.00 cans.

PRATTS HOG WORM POWDER

Only for hogs, and it is guaranteed to rid hogs of worms or money back. The worms simply cannot exist when our powder is given. Use the powder to prevent worms. In packages, 50c and \$1.00.



PRATTS WHITE DIARRHOEA REMEDY.

Millions of little chicks die annually from white diarrhoea. This disease can be both prevented and cured by the use of Pratt's Guaranteed White Diarrhoea Remedy. Regular size box, 50c, mailed postpaid upon receipt of price. Also trial size box, 25c.



PRATTS SPAVIN PASTE.

(A Blister.)

Is the best remedy for any spavin or enlargement that can possibly be removed. Heals without a scar. Full directions with every box. Sold at 50c.

PRATTS VETERINARY LINIMENT.

Acts both as a counter-irritant, drawing out the inflammation, and also as a penetrant. Can be used either to blister or without blistering, by regulating the application.

Cures rheumatism, lameness, sprains, bruises, contracted muscles, shoulder or stifled lameness, thrush or canker, cockle joints, sweeney, kicks, sore throat, quinsy, curb, splint, capped hocks, shoe boils, pneumonia and inflammation of the lungs.

No farmer, horse owner or live stock owner should be without a bottle—you cannot buy a better liniment at any price. Sold in 25c, 50c and \$1.00 bottles.



PRATTS LIQUID SPAVIN REMEDY.

Has both a penetrating and counter-irritant effect—and is the best remedy for Rheumatism, Neuralgia, Felons, Chilblains, Burns, Sore Throat, Diphtheria and any lameness, bruise, cut or pain—also all cases of Spavin. Can be used to blister or not blister, as required. Sold in 50c and \$1.00 bottles.



PRATTS VETERINARY COLIC CURE.

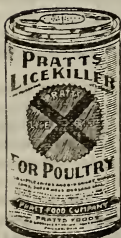
Has a record of 998 cases of colic cured out of 1,000 cases treated. One of the most remarkable remedies known; and although expensive to prepare, the price is very low.

It is a positive remedy in all cases of flatulent colic (sometimes called bloat), spasmodic colic, gas colic, kidney colic, and acute indigestion. Its action is quick, and a cure certain, when used according to directions. Sold in 50c and \$1.00 bottles.



PRATTS LICE KILLER.

(Powdered Form.)



Is entirely unlike any other preparation of the kind on the market today. It is non-poisonous and non-explosive, and, being stronger, has greater disinfecting qualities.

It quickly and thoroughly kills all lice on little chicks, big chicks, sitting hens, and incubator chicks—with it, nests, litter and dust baths are sprinkled. It rids horses, cattle, hogs, dogs, and cats of lice, and destroys ticks on sheep. It destroys insects and bugs that ruin shrubbery, vines, plants and flowers.

It is a valuable deodorizer and disinfectant and should be used in all poultry houses, barns, stables and dwellings. It also drives out moths and bugs from closets, furniture, carpets and clothing. Refuse all imitations, and insist on getting the genuine Pratt's Lice Killer. Sold in 25c and 50c packages.

PRATTS DISTEMPER AND PINK EYE CURE.

Goes direct to the cause of the disease, purifies the blood, prevents weakening of the internal organs caused by impure blood, or poisoned by absorbing the impure matter from the abscesses.

Positively free from poisons; works quickly and thoroughly, and differs entirely from all other so-called "distemper cures," which so often leave the horse with a cough, heaves, eruptions, etc. Pratt's Cure cures and leaves no bad after-effects. Sold at 50c a bottle—do not accept substitutes.



POULTRY AND STOCK FOODS, REMEDIES, ETC.

Conkey's Roup Remedy—This truly wonderful remedy is used in every civilized country of the world. The reason is that it cures. Until it was brought out Roup was considered incurable. Innumerable trials under every condition and in every climate prove that it will cure if given in anything like reasonable time. This remedy should be kept on hand so that you do not have to wait and let your fowls die before applying it. Fowls are many times cured of Roup, even in more advanced stages, by dipping their heads according to special directions with package. If the remedy can be made to reach the membranes of head and throat passages, a cure can be effected, providing that the fowl has enough vitality left for any foundation. If attended to earlier you avoid the trouble of individual treatment. Conkey's Roup Remedy is also excellent for Turkeys, and it is



the greatest remedy known for Cancer in Pigeons. Prices, 50c or \$1.00, postpaid.

Conkey's Bronchitis Remedy—While Bronchitis has the general appearance of Roup, it is a distinct disease which requires a special remedy. It is an inflammation of the membranes of the nostrils and head passages. This remedy is a guaranteed specific for this dangerous ailment. The careful discrimination between this disease and genuine Roup will save you many a fowl besides the useless trouble of treating for one disease when it is entirely another. Price, 50c, postpaid.



Conkey's Cholera Remedy—When a fowl is attacked by diseases of the digestive organs, there is a loss of appetite and a greatly increased thirst; therefore we have put out this remedy in such a form that it must be given in the drinking water. As the fever creates a continuous and violent desire for water, the logic of this treatment can be appreciated. Most of the so-called cholera remedies on the market are powders directed to be given in the food. Realizing the utter absurdity of trying to cure the fowl in that manner, owing to its abhorrence of food, we have put out Conkey's Cholera Remedy in such a form that the fowl will take its own medicine. This preparation is entirely different from anything else ever put out, and can be absolutely relied upon as the most dependable Cholera Remedy made. It is tasteless and the bird will take it eagerly. It has a soothing, cooling effect on the hot and inflamed membranes and reduces the fever at once. For the treatment of Cholera,



Indigestion, Bowel Trouble, Diarrhoea, and all kindred troubles in chicks or grown fowls, this remedy is excellent. Conkey's Cholera Remedy is the great common-sense insurance against a great variety of the troubles known to

poultrymen. It should be kept on hand by everyone who raises little chicks, as it will be needed at once on appearance of disease. We guarantee it to satisfy you. Prices, 25c, or 50c postpaid.

Conkey's Chicken Pox Remedy—It is a reliable remedy for a disgusting and dangerous disease. Chicken pox is known in different localities by entirely different names, being called Pian, Sore-head, Warts, and Pigeon Pox. They are all the same contagious and loathsome disease and can be cured if taken in anything like proper time.

It is very important in treating this disease that absolute cleanliness should be considered and, while we sell Conkey's Nox-I-Cide in separate packages and for a separate price, it should be considered an important part of the treatment for Chicken Pox. Unless you disinfect and clean house, this disease will not stay cured, but will spring up as fast as you can give a remedy.

The salve is applied to the warty growths according to directions, while the powder is given in the soft feed to drive the disease from the blood. You will find it a most thorough and efficient remedy and will never use another after a thorough knowledge of its easy curing of this annoying and nauseating disease which is often called the "Small Pox" of the poultry yard. Prices, 50c or 55c, postpaid.



Conkey's Limber Neck Remedy—Limber Neck may prove to be a very fatal disease, as it takes but a little time to terminate in death if a remedy is not at hand. We would certainly advise poultrymen to provide themselves with a package of Conkey's Limber Neck Remedy at once, and not to wait until the disease is established and they learn its fatal nature by costly experience. In the first



place it is a very easy matter for the fowls to acquire this disease. It is a ptomaine poisoning which comes from the fowls eating putrefying flesh. A dead rat under the barn, or a dead fowl in some out-of-the-way corner, may cause this deadly ailment when you are not prepared to meet it, and before you can send and procure the remedy many of your fowls are past saving. While Limber Neck is terribly fatal when no remedy is available, it is a very easy disease to master when Conkey's Limber Neck Remedy is at hand, and we are receiving endorsements from many poultrymen who have

cured their fowls, though they have believed this disease incurable in years past, because they did not have the remedy on hand. Don't let it be too quick for you, but insure your flocks by having it on your shelf. One day's treatment is usually sufficient to effect a complete cure. Conkey's Limber Neck Remedy is a specific prescription put up to cure this one disease only. Do not be deceived by substitution of anything that is claimed to cure both this and other diseases. The age of cure-alls has passed and poultrymen are realizing that each disease should have its special remedy. Prices, 50c or 55c, postpaid.

CONKEY'S FLY KNOCKER

Conkey's Fly Knocker.—Scientists have proved that many infectious and dangerous diseases are communicated by flies and other insects, which carry the germs and enable them to infect man, beast and fowl. Not only do they spread the germs, but they are a menace and an annoyance to the peace and health of your stock. From the time that the flies first put in an appearance in the Spring, until late in the Fall, they worry and torment the stock keeping them irritated and causing them to lose flesh, which is replaced only after loss of time and much extra feeding.

Conkey's Fly Knocker—Settles the fly problem. We know many worthless articles on the market which have done much to disgust the public and injure legitimate trade. We do not offer the cheapest article known, but the best, It will do just what we claim for it, and we guarantee it to satisfy you. Should it fail to do so, your money will be refunded.

Conkey's Fly Knocker is sprayed directly on the animals, or can be applied with a cloth. It both kills the flies and drives others away. It will rid your stables of flies and will give the tails a rest. It is positively harmless. It will not taint the milk. If used on stock in Summer it will prevent lice and grub in the Winter. Sprayed on your horse before going for a drive it will keep the flies away and prevent the fretting so wearing to a nervous animal. One ounce of liquid will spray two animals. Farmers, dairymen, stablemen, and horseshoers find it too valuable ever to be without it if they once try it. Saves milk, saves flesh, saves spirit, saves time in handling stock. Stablemen find it saves shoes and floors also.

The camper could enjoy his outing were it not for the mosquitoes which make camp life miserable. Conkey's Fly Knocker will also settle the mosquito's bill. It is perfectly harmless, has a pungent odor, and it keeps every insect out of buzzing distance. Prices, 1 quart, 35c; 2 quarts, 60c; 1 gallon, \$1.00. Expressage extra.

STANDARD FLY AND GERM KILLER

This is a preparation to protect cows and horses from the torture of flies and prevents and cures germ diseases. It kills lice on cattle and poultry.

Standard Fly and Germ Killer may be applied on all kinds of animals and poultry with any sprayer. Fill the sprayer about two-thirds full of liquid.

To Prevent Flies From Annoying Horses and Cattle: Spray the animals freely morning and night. If the liquid is too thick add a little kerosene which will make the sprayer work more freely.

Lice on Cattle:—Spray the animal and bedding. To kill sheep ticks spray same as for other animals. Apply the same on swine.

For Hen Lice:—Remove all straw and dust from nests and spray the nests, roosts etc., thoroughly, in the afternoon. Put fresh straw in the nest, do this about every ten days.

For Other Purposes.—To prevent abortion, tuberculosis, hog cholera and all distempers, spray the bedding and stalls every day where the animal is kept. The odor must be constantly inhaled, especially in the Winter months.

This product is guaranteed under the insecticide act of 1910. Price, 1 quart, 35c; ½ gallon, 60c; 1 gallon, \$1.00. Expressage extra.

KOW KURE

Kow Kure.—This is different from anything ever discovered for cow troubles. It is the only cow medicine that is strictly for cows only. It is not a stock food, but a specific remedy especially for cow diseases, such as Barrenness, Scours, Milk Fever, Caked Udder, Bloating, Red Water Swelling of the Bag, etc. It prevents abortion and removes retained after-birth. It tones up the system, renews vitality, restores appetite to cows that are "off feed," and keeps them healthy. Makes poor cows good; good cows better, and makes more money for cow owners. It increases the milk flow, and enables the cows to produce strong, vigorous calves. It's the dairyman's gold mine, and a sure profit payer. Price, 50c and \$1.00 cans.

Lee's Egg Maker—Is not a tonic nor a medicine, but a meat food of great value. It will make hens lay, chicks grow, and keep them all in a healthy vigorous condition. 2½-lb. pkg., 25c; 5½-lb. pkg., 50c; 25-lb. pail, \$2.00. 100-lb. sack, \$7.00. Expressage extra.

Avenarius Carbo-lineum.—The famous German wood preserver and insecticide. Paint or spray your chicken house, hog pens, stables, sheds, etc., with Avenarius Carbo-lineum, to permanently destroy all poultry and other vermin and preserve your buildings from rot and decay. Quart can, 40c; gal., \$1.50; 5 gal., \$6.00. Expressage extra.

GERMOZONE

Germozone.—The cure that cures. Its action is marvelous. Never fails to cure Bowel Complaint, Cholera, Roup, Colds, etc. Whatever malady threatens, Germozone will cure or prevent. Germozone's greatest value is in prevention of sickness. If you wait until a hen is sick, you lose several weeks of egg production, even though you cure her. Germozone prevents sickness by regulating the bowels,

and should be given regularly twice a week in the drinking water to chickens, young or old, sick or well. Prices, Lee's Germozone, liquid 12-oz. bottle, 50c; tablets, pkg., 50c, postpaid.

Tobacco Stems.—Excellent for making nests or scattering about among the litter in the hen house to keep down vermin. Price, 10 lbs., 25c.

TOBACCO DUST

Tobacco Dust.—One of the cheapest and most effective remedies for destroying lice and worms on Cabbage, striped bugs on Melons, Cucumbers and Squashes, and other insects. It is best to dust on young plants when the dew is on, as it will stick better. For cabbage well grown and other large plants a little kero-

sene oil can be mixed with the Tobacco Dust, though great care should be taken not to put in too much oil. Our product of this is finely ground so as to reduce it to an impalpable powder. Per lb., 15c., postpaid. Write for special price for large quantities.



Sell the Milk and Raise the Calves

RAISE them the modern way—*without milk*—on a *complete milk-equal*, at less than the value of skim milk.

They must have some substitute for the butter-fat which you sell to the creamery, in order to grow rapidly and become profitable calves. Separator milk alone will not do, and anything but the thinnest separator milk is too valuable to feed.

Blatchford's Calf Meal *The Complete Milk-Equal*

contains all the elements of whole milk, the same proportions of protein and fat as whole milk and costs you only about four cents a gallon. It gives the calf the needed nourishment without interfering with your sales of milk and cream at high prices.

It is absolutely the only milk-substitute that contains all the elements necessary for rapid and healthy growth, and the only calf meal that is thoroughly cooked and prepared for digestion.

It is very easily prepared and fed. Directions will be found in each bag.

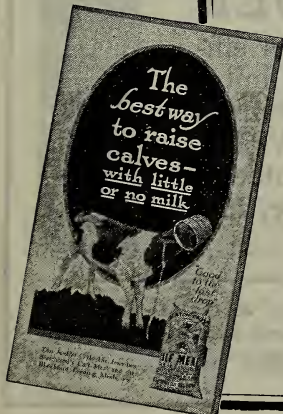
Average analysis of Blatchford's Calf Meal from a number of analyses taken at various times:

Protein, 25 per cent Fat, 5 per cent

**100 pounds makes 100 gallons
of Complete Milk-Equal**

25 pounds	50 pounds	100 pounds
\$1.25	\$2.25	\$4.00

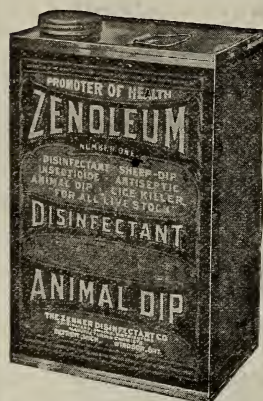
**This
booklet
is free
—send
to us for
your copy**



ZENOLEUM

DISINFECTANT---ANIMAL DIP
Lice Killer --- Insecticide --- Antiseptic

*Used by 46 State Agricultural Colleges
 For Cattle, Sheep, Hogs, Horses, Poultry, Dogs*



Here is the most wonderful Disinfectant, Animal Dip and Livestock Remedy in all the world. It kills lice and vermin of all kinds. Cures sores and wounds on animals and poultry. It is very economical and can always be depended upon for positive results.

TRY A CAN ON OUR SAY SO

8 ounce, 25c; quart, 50c; gallon, \$1.50;
 five gallons, \$6.25.

The Zenoleum Guarantee: If Zenoleum Products are not all we say they are, or even what YOU think they should be, you can have your money back. No argument, no letters, JUST MONEY. Don't that make you feel safe?

ZENOLEUM LICE POWDER

This is especially prepared for poultry, but is efficient on all livestock. It does destroy lice and mites on poultry, removes fleas from dogs and lice from cattle and horses. We are positive this is the VERY BEST of all the lice powders, and we guarantee it absolutely. Price for Full One-Pound Package, 25c.

Not Prepaid. Postpaid 35c.



Send for Free Books "Zenoleum Veterinary Advisor," for live stock owners.
 "Zenoleum Chicken Chat," for all interested in poultry.

I will gladly send either one to YOU, perfectly FREE

Manufactured Under Niagara Sprayer
Co. Patents

The SULPHUR SPRAY PERFECTED

SOLUBLE SULPHUR COMPOUND is powdered by a fusion process (not by boiling) whereby sulphur is combined with a true solvent (soda ash). A perfectly soluble compound, high in sulphur as polysulphides, is the result.

This compound is analogous in chemical form to the calcium polysulphides of a high grade lime-sulphur solution.

Soluble Sulphur is the sulphur spray with the water left out.

It is ready for the user to add the water and in an instant have a true sulphur solution. It dissolves readily, it being necessary to stir for a few moments only as the material is put into the water. Once dissolved it remains in solution for an indefinite time.

One hundred pounds of Soluble Sulphur Compound makes more spray than a fifty-gallon barrel of thirty-three degree lime-sulphur solution weighing over six hundred pounds, thus effecting a saving on freight charges and hauling of five hundred pounds.

There is no leakage, no freezing, no crystallization, no barrel to return or pay for.

It is not only safe to trees, but is a benefit.

It is the most economical of all sprays used as lime-sulphur as an insecticide and fungicide. It should be used on all kinds of trees and shrubs in spring, before buds open, for Scales, Aphids, Curl Leaf, Mildew, and as a general clean-up; and later for control of Scab and Fungus Diseases.

In order to determine amount required, when one is familiar with lime-sulphur solution, order a one-hundred pound drum in place of a barrel of solution. For average use, one hundred pounds of Soluble Sulphur will be sufficient for two acres of orchard.

Soluble Sulphur Compound will keep indefinitely, without loss of strength, if the can is kept tightly covered and in a dry place.



PRICES.

1-pound can.....	\$0.20
10-pound can.....	1.25
100-pound drum.....	7.50

F. O. B. Seattle or Portland.

The 1-lb. and 10-lb. cans may be shipped by parcel post. See parcel post rate, cover page.

WARNING.—The success attained by Soluble Sulphur Compound during three years of severe trial has encouraged the placing on the market of inferior sodium and caustic soda compounds. Beware of these. The only reliable and guaranteed Soluble Sulphur Compound is made and sold on the Pacific Coast under the label **LILLY'S**

Why pay freight charges on water? You have plenty of water at home.

General Directions

For San Jose Scale, Oyster Shell Scale, Aphis Eggs, Blister Mite and other sucking insects, use 20 to 25 pounds (according to extent of infection) of Soluble Sulphur Compound to each 100 gallons of water, during the dormant season.

For Peach Leaf Curl and Twig Borer use 20 pounds of Soluble Sulphur Compound to each 100 gallons of water just before buds swell. Do not use at this strength after buds open.

For Apple Scab, Mildew and other fungus diseases the range of strength is from 2 to 8 pounds to 100 gallons of water. Our printed directions should be closely followed, as time of application is all important in fungus control.

For Red Spider on citrus trees use three pounds of Soluble Sulphur Compound to 100 gallons of water.

Sprays, Spray Materials, Etc.

LIQUID SPRAYS CANNOT BE MAILED. SOLID SPRAYS,
EXTRA FOR POSTAGE.

Lime and Sulphur Solution

THE SCALE KILLER

"Butzer's Best"—A perfect lime and sulphur solution is the best known remedy for San Jose scale, anthracnose and other fruit pests. While lime and sulphur has been recommended by agricultural experiment stations, and has been used more or less for several years, it is only recently that a solution has been put on the market ready for use. The advantages of a commercial lime and sulphur spray over the home-made article are considerable.

It is a matter of fact that all who give instructions for use of the home-made article advise putting it on the trees while hot. This is undoubtedly to prevent the undissolved parts from settling, and thus clogging the pump.

Butzer's Best Lime and Sulphur Solution is made under heat, maintained at a very high temperature during the cooking, which, with proper proportions of lime and sulphur, insures a complete and perfect chemical combination. The water becomes completely charged with the lime and sulphur, and forms a perfect and highly concentrated solution of a brilliant red color, free from sediment, and all you have to do is to dilute it with water—one part solution to nine or eleven parts of water, according to the condition of the trees.

Price: 50-gal. bbl., \$9.00; 5-gal. can, \$1.50; gal. can, 50c; quart bottle, 25c.

Bug Death—A non-poisonous insect killing powder that is in high favor among the market gardeners for cabbage, tomatoes and cucumber bugs, etc. Takes 12 lbs. to acre. Per lb., 15c; 5 lbs., 65c. Write for price on large quantities.

Hammond's Slug Shot—For destroying slugs, cabbage and turnip flea, currant worms, etc. Per lb., 15c; 5-lb. pkg., 50c.

Hammond's Grape Dust—To prevent Mildew on roses, grapes and gooseberries. Per lb., 15c; 5-lb. pkg., 50c.

Hellebore Powdered White—For the destruction of slugs, worms, caterpillars, etc. Can be used as a powder or dissolved; 1 oz. to 3 gallons of water. Per lb., 30c.

Bordeaux Mixture (Liquid)—Very effectual in preventing and checking all fungous diseases, such as potato rot, potato blight, rust and mildew. One gallon to 50 gallons of water. Full directions on can. Quart, 60c; gallon, \$1.25.

Black Leaf "40"—Latest and best tobacco spray. 1 lb. makes 170 gals. $\frac{1}{2}$ lb. can, 85c; $2\frac{1}{2}$ lbs., \$3.25; $10\frac{1}{2}$ lbs., \$12.50.

Potassium Sulphide (Liver of Sulphur)—One of the best preventatives of mildew on roses and berry bushes. Dissolve $\frac{1}{2}$ oz. in one gallon of hot water. When cold apply as a spray. Price, 1 oz., 10c; 1-lb. can, 50c.

Paris Green—The standard of purity. Guaranteed superior to other makes. Price, $\frac{1}{4}$ lb., 15c; $\frac{1}{2}$ lb., 20c; lb., 35c; 2 lbs., 65c.

Sulphur (Finest resublimed)—Use no other if you wish results; prevents and cures mildew on peas, roses, grapes, etc. Per lb., 10c; 100 lb. price on application.

Blue Stone (Blue Vitriol)—10c. per lb. Write for special price on larger quantities.

Sulpho-Tobacco

Plant and Animal Soap

(PATENTED)

AN INEXPENSIVE INSECTICIDE.

A sure, immediate and convenient exterminator of all insect life and vermin on plants, shrubbery, vines, small fruits and trees.

Non-poisonous and absolutely safe to handle. It will not injure the tenderest growth. A powerful fertilizer, reviving plants wilted from the ravages of insects.

For domestic purposes it is valuable as an exterminator of moths, cockroaches, carpet bugs, etc.

Dissolve about two ounces of Soap in a gallon of warm or cold water. Apply liquid, when cold, with atomizer, common sprinkler, etc. Many of the most famous florists and growers constantly and extensively use Sulpho-Tobacco Plant and Animal Soap, with gratifying results.

3-oz. Cake—makes $1\frac{1}{2}$ gallons prepared solution—10 cents. Mailed postpaid, for 13c.

8-oz. Cake—makes 4 gallons—20 cents. Mailed postpaid, for 28 cents.

Guaranteed Under Federal Insecticide Law.

Sulpho-Tobacco Plant and Animal Soap always gives entire satisfaction; there is no insect but that will succumb to it. It is invaluable to every lover of flowers.

Formaldehyde—The loss to the farmers of the United States from smut and other fungus diseases of wheat, barley, oats and other grains amounts to millions of dollars every year. The spores or seed of the fungus are on the seed grain which you plant; when the grain sprouts and grows the fungus grows, too; it follows up through the stalk into the blade and into the ear, and the result is blighted plant, smut grains and a decreased yield of inferior quality. The same holds true of scab, which has proved such a blight to the Irish potato crop. We want to remind you that you have been contributing your share to this tremendous loss and that you can stop it by treating your seed grain and potatoes with some good germicide which will kill the fungus seed. Probably the most effective of these agents is Formaldehyde; but the economy of its use depends upon its strength and purity. You can't afford to take any chances in this matter; when your seed is in the ground it is too late to correct the mistake. If you buy weak, adulterated Formaldehyde, it will not show until the grain is half grown. Can you afford to use it? The price of a bushel of wheat expended for Formaldehyde will add several bushels to the next harvest. It takes as much land and labor to raise a light crop as a heavy one. Think it over. Sold only in original sealed bottles. Pint, 50c. One pint is sufficient to treat 40 to 50 bushels of oats. Cannot be sent by mail.

Arsenate of Lead "Paste"—The best remedy against codling moth, curculio and rose bugs. It sticks to the foliage and is absolutely free from the danger of burning. 1 ounce will make 1 gallon of spray. Price per lb., 25c; 5 lbs., 90c; 10 lbs., \$1.75. Write for prices on larger quantities.

Nicoticide—The best fumigator and spray for greenhouses, kills aphids, red spider, mealy bug, thrip, etc. Pint can, \$2.50; gallon, \$15.00.

Present Conditions Make Spraying Necessary

During the past few years there has been a rapid increase in destructive insects. This condition has been brought about partly by the importation of insect pests from other parts of the world—pests which have thrived in their new homes unhampered by the inroads of the parasites that kept them under control in their original haunts. Then we have our native insects, which since the tremendous decrease in forest area, have turned their attention to the orchard and garden. Infested orchards and gardens have passed the infection along into new territory, and at the present time, destructive insects in injurious numbers are found in every part of the country.

These insects multiply so rapidly that unless checked and brought under control, they will either destroy or seriously injure the development of the fruit and shade-trees or vegetables on which they are feeding. There is only one conceivable remedy and that is to spray. This method was formerly looked upon as an expense, but it is now considered a necessary and profitable part of the work of growing fruits and vegetables. Today the man who expects to get the most out of his efforts in tilling the soil, must work scientifically and control the many insects and fungus diseases by intelligent use of spraying materials now on the market.

SHERMAN-WILLIAMS CO. NEW PROCESS ARSENATE OF LEAD.

S-W New Process Arsenate of Lead has many advantages over other arsenical insecticides, in that it contains the largest amount of arsenic possible to combine in an absolutely safe combination. In other words, it does not have excess arsenic which will remain free or loosely combined and be liable to cause foliage burning. S-W New Process Arsenate of Lead completely covers and adheres to the foliage, remaining there even when exposed to very severe rains. It is extremely miscible in water and combines readily with Bordeaux or Lime-Sulfur.

A product of this character is the very best kind for fruit-tree or vegetable spraying, designed to eradicate all leaf-eating insects. Put up in 1-pound glass jars, 5, 12½, 25, 50 and 100-pound steel containers, also barrels.



CLASSES OF INSECTS AND DISEASES.

The various pests which infest fruit trees and gardens may be divided into two distinct classes. First of all is the **Chewing Insect**, which has a pair of jaws with which it attacks the leaves, fruit, and softwood of the trees and plants.

This class of insects is best controlled by an arsenical poison, such as Arsenate of Lead or Paris Green which covers the foliage and fruit thoroughly and is devoured by the insect or caterpillar in question in the act of obtaining its food supply.

The other class of insects, injurious to vegetation, is the **Sucking Insect**, to which class belong the various scale insects, aphids, etc. They have a beak which they imbed in the branches, fruit or trunk of the tree and in this way suck the sap and greatly decrease the tree's vitality.

Scale or sucking insects should be controlled by means of a **Contact Spray**—namely, Lime-Sulfur Solution, as a poison will have practically no effect on them.

Fungus Diseases are caused by a low form of vegetable life, known as fungi, which live upon the tissues of the vegetable matter. They obtain their nourishment by breaking down the cells of the vegetable or tree on which they exist. Among the most common ones are: Apple Scab, Brown Rot, Apple Blotch, Leaf Rust, Sooty Fungus, etc.

In fighting diseases of this character it is necessary to apply a fungicide such as dilute Lime-Sulfur Solution or Bordeaux Mixture.

WRITE FOR PRICES.

SPRAY PUMPS, ETC.

The O. K. Spray Pump

The O. K. Spray Pump, adapted to be used in connection with an ordinary barrel. One of the special features of this pump is a clamping device, by means of which it is attached to the top of the barrel. It will be noticed that this arrangement can be adjusted to suit any barrel, regardless of the height or width.

The cylinder is what is known as a ram plunger, made of solid brass tube, with a closed end, which passes through a circular hemp packing, which adapts it for pumping hot, cold or any kind of mixture. The packing gland is adjusted by means of two heavy bolts, with which all wear can readily be taken up. The valve and seat are made of ordinary brass, ground in a bevel shape.

Another special feature of this pump is that by removing two heavy bolts the valves can be readily taken out and repaired. The air chamber is made of 2½-inch steel tube. The handle is wrought steel with adjustable stroke, so as to enable the operator to get up a pressure of 200 pounds or more if necessary. It is fitted for two strings of discharge hose.

O. K. Spray Pump, as shown (without barrel); price.....\$13.00



No. 632 Spray Pump

In this pump we offer to our friends a brass bucket spray pump with more real advantages than are contained in any other make of spray pump now on the market.

It has all the advantages of the ordinary barrel pump and bucket pump combined, and is sold at a moderate price. Has one-half more air chamber than any other make of bucket pump. Is made of brass, with ball valve; handle and foot rest are malleable iron.

The work is all done on the down stroke of the handle, and it can be operated with one-third the power required for any other old-style bucket spray pump.

It is no experiment. It has been thoroughly tested.

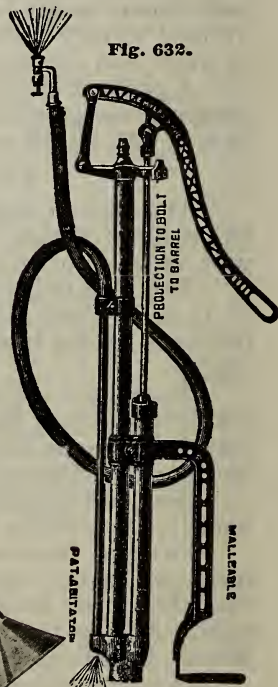
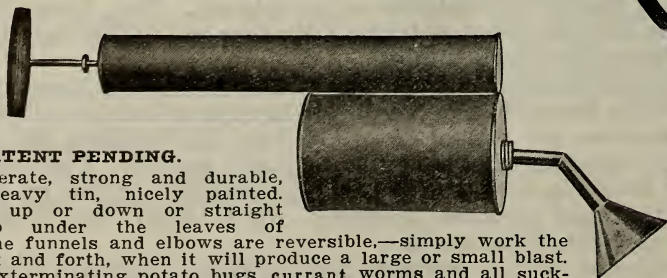
When used as a barrel pump, detach the foot rest and attach pump to top of barrel.

No. 632. Lever Bucket Spray Pump, with agitator, complete with hose and graduating Vermorel fine, coarse spray and solid stream nozzle. Price\$3.75

No. 12 "Lightning" Dry Powder Pump

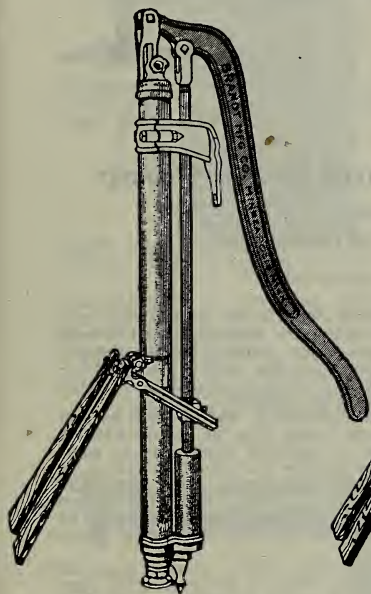
PATENT PENDING.

Easy to operate, strong and durable, made of heavy tin, nicely painted. Will spray up or down or straight ahead, also under the leaves of plants, as the funnels and elbows are reversible,—simply work the plunger back and forth, when it will produce a large or small blast. Useful for exterminating potato bugs, currant worms and all sucking insects. It will handle insecticide in the powder, such as paris green, hellebore and bug death; also used for tobacco plants and various other purposes. This machine is far superior to the old leather bellows, as it is much more durable and throws an even blast and is lighter and easier to operate. Price \$1.00

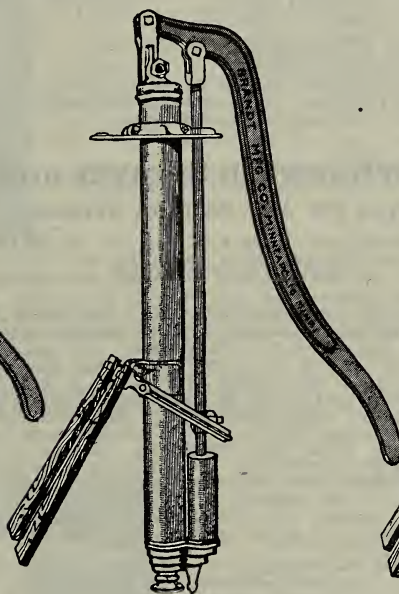


THE "KING" SPRAY PUMPS

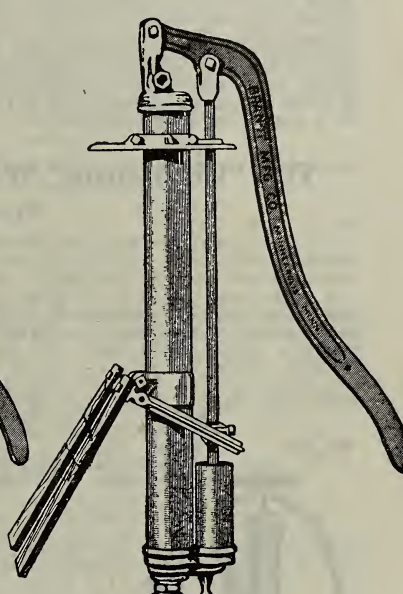
Made for orchards where the trees are large and a great quantity of liquid is to be handled. These pumps are built in three sizes as shown below and are so arranged that they may be mounted in any barrel and can be adjusted to varying heights. They have extremely large air chambers which insure a uniform pressure at the nozzle, large cylinders which give great capacity, and removable ball valves which enables the user to keep pump in good working condition without taking it apart. These pumps have self-oiling plungers and are constructed so that the packing may be tightened without taking the plunger out of the cylinder. No leather or rubbers are used in the pumps; the packing is specially prepared and will withstand the action of spraying chemicals



No. 4.



No. 5.



No. 6.

longer than any other material and can be replaced in a few minutes at a nominal cost. The pumps have following dimensions. No. 4 has 1¾ in. cylinder; 2-in. air chamber and fastens to chime of barrel. No. 5 has 2-in. cylinder, 2½-in. air chamber and fastens to end of barrel. No. 6 has 2½-in. cylinder and 3-in. air chamber and fastens to end of barrel. No. 5 and 6 have door castings to cover filling hole, which make it unnecessary to cut more than one hole in the barrel head. The head castings carry a pattern for cutting the opening in barrel. These pumps have the twin type mechanical agitator, made of hard wood, extra long with adjustable stroke so that it can be used in any form of tank or barrel. The pumps are sold plain or with the following equipment and at prices shown.

"KING" PUMPS AND OUTFITS

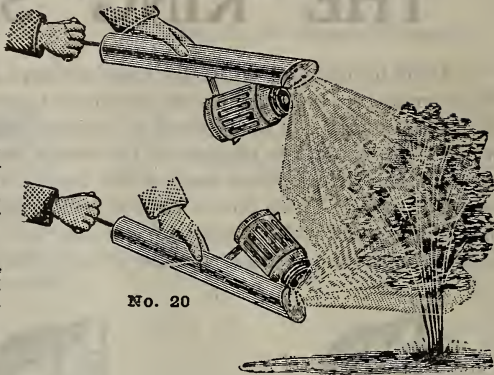
No. 4 "King" Pump, plain.....	\$8.50	No. 6 "King" Pump, plain.....	\$13.00
No. 4A "King" Pump, with 5-ft. pressure hose, nozzle, hose clamps, etc.....	10.50	No. 6A "King" Pump, with one lead of 15-ft. pressure hose, 8-ft. of pipe, brass shut-off cock, nozzle, hose, clamps, etc.....	17.25
No. 4B "King" Pump, with 12-ft. pressure hose, nozzle, hose clamps, etc.....	11.50	No. 6B. Same as No. 6A but with two leads hose and double equipment..	21.65
No. 5 "King" Pump plain.....	10.00		
No. 5A "King" Pump, with 15-ft. pressure hose, 8-ft. pipe, brass shut-off cock, nozzle, hose clamps, etc.....	14.25		

Our No. 20, the King of All Sprayers

Is made with beveled air chamber, which enables the operator to spray in any direction desired, and has a glass reservoir, detachable, encased so that the operator at all times can see the ingredients mixing and just how they are working.

The glass reservoir is made like a Mason fruit jar, and any such will fit this sprayer. Being oblong, it gives a churning motion while the sprayer is in use, mixing the ingredients—which cannot be done with any other shaped sprayer—and will not allow paris green to settle. The glass sprayer will not corrode or rust out, as is the case with all other metals. This will be appreciated at a glance.

The screw cap of this sprayer is made of heavy zinc, funnel shape; therefore the user does not have to bother with a funnel for filling the reservoir. A cork is used for the filling hole. This will not rust like a screw cap and if it should become lost, any ordinary cork will fit the opening. This sprayer is provided with our patent spring expander, which keeps the plunger leather open and prevents it from becoming wrinkled or drying up. These points are important and will be appreciated at a glance by any one familiar with sprays of this class.



No. 20

Price, 75c each

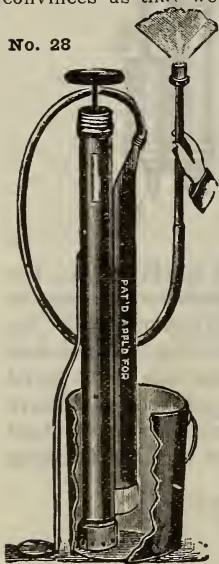
The "Lightning" Whitewash Sprayer and Force Pump

WILL FIT ANY PAIL OR BUCKET.

We take great pleasure in placing this circular of our No. 28 Whitewash Sprayer and Force Pump before the public, as heretofore there has been no way to properly apply whitewash, except the old way, with a brush and this has been unsatisfactory.

A whitewash pump must be so constructed that it will spray the preparation properly and for the most important point, it must not clog. Knowing that there would be a big demand for a pump of this sort, we have been experimenting for some time on a machine that would properly spray whitewash, one that would work rapidly and one that would be impossible to clog. This we have accomplished and are now offering our pump to the public and receiving many orders from all parts of the world, and also a great many re-orders, which convinces us that we have a pump that is up to the standard in every respect.

No. 28



This is the only spray pump that will properly spray whitewash without clogging and it will do better work than can be done with a brush, as the force with which the material is applied causes it to penetrate the small crevices, thus making a complete and perfect job. It fills the cracks and crevices, where you will generally find lice, and which places you cannot reach properly with a brush, but this pump forces the liquids into all of these rough places and the work can be done ten times as quick as with a brush, more thoroughly and a great deal neater.

The pump is constructed of heavy galvanized iron, nicely painted, with brass tops and bottoms, and is furnished with a brass nozzle that will give two different sizes of spray. It has a steel stirrup and is furnished with three feet of heavy hose and a foot of extension rod. (The same pump is also made entirely of brass.) It has ball valves, is double action, and is made with a large air chamber, the pressure being held in the air chamber and on the hose so that the nozzle throws a continuous spray or stream and is not affected by the upward stroke. The operator is able to keep a constant pressure on the nozzle with little exertion.

The pump is provided with an overflow, so that the liquids which get above the plunger leather, instead of coming out of the top of the pump, will run back into the pail. The plunger may be taken out instantly, also the ball valves. There are no parts to get out of order and the machine is easy to operate. The brass nozzle will give a spray or stream, whichever is desired.

The pump is used for a bucket spray and force pump, such as for spraying trees, shrubbery, garden use, vegetables, washing wagons, windows, etc., as well as for whitewashing. It will throw a continuous stream 35 feet high. It is very neat in appearance, as well as durable.

If desired, we can furnish a small extra cost three feet of brass extension rod, which will screw onto the extension already furnished with the pump. This is used for whitewashing where the ceiling is high and also for spraying trees. Each machine is fully guaranteed.

No. 28—Galvanized Iron.....\$1.50

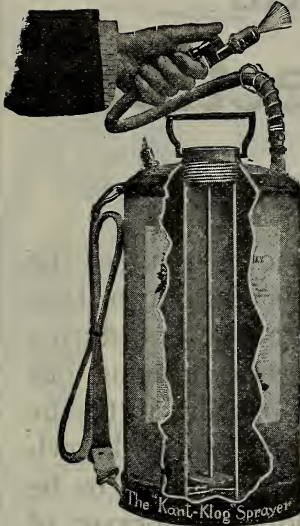
A GOOD RECIPE FOR MIXING WHITEWASH AND A FEW THINGS WORTH KNOWING.

For mixing whitewash, take a lump of unslacked lime about the size of your double fist and slack it in about ten quarts of water, also add two handfuls of salt. Let this dissolve and then it is ready for whitewashing. Of course, it is understood that the more times you go over the surface to be whitewashed, the whiter it will get. The salt put into the whitewash is to make it stick to the surface.

No matter how well built your poultry house is, or how nice it may be kept, whitewash it and use the "Lightning" Whitewash Sprayer in doing this, as it gets into the crevices and places that cannot be reached with a brush, and the whitewash is sure death to lice.

The building should be whitewashed at least two or three times a year.

The Kant Klog Sprayer—The First Compressed Air Sprayer Ever on the Market



Two years later — others began copying our goods and methods, and still do so. During all these years the **original and distinct features found in no other line** have enabled us to hold continuously the patronage of the largest and best concerns in the world.

The loyalty of this trade — together with the constantly increasing demand from others for a **more reliable and better fitted sprayer** than they have been using necessitates again enlarging our facilities to such an extent that the enormous quantities now produced enable us to give better value in sprayers than you have ever before enjoyed.

The “**Kant-Klog**” Sprayer on the “**Kant-Klog**” nozzle described above, the item of labor alone is **three times what the ordinary nozzle can be furnished for**. Hose is high grade — supported by coiled spring to prevent breaking, couplings solid brass with standard cut threads. Air pump of heavy brass tubing two inches in diameter.

The Sprayer body is made of heavy polished brass or galvanized steel as desired. Both top and bottom are dome shaped; joined to body under heavy pressure, **making a complete double stream**. When completed this body is thoroughly tested at double the pressure ordinarily used, the result being that **not one in a thousand** give any of the troubles common with other constructions.

Sprays Trees, all kinds of Small Fruits and Garden Vegetables, Disinfectants, Whitewash and many other uses.

Price, \$4.00 each.

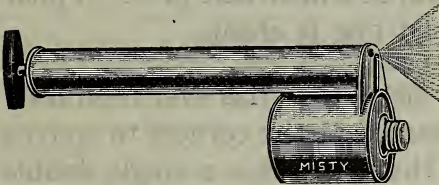
SPRAY HOSE

“**BUTZER’S BEST**” 7 PLY DOUBLE TUBE—This has almost as thick a tube as steam hose, and we guarantee it for the hardest service. The chemical solution will not penetrate the double thick tube and destroy the hose. The best hose on the market for the money.

Price, per foot, in 25 or 50-foot lengths. 12 cts.

In shorter lengths at an extra cost of 25c for couplings.

I also carry other brands of Spray Hose, and would be pleased to send sample and price. Write today.



THE “MISTY”

SINGLE ACTION.

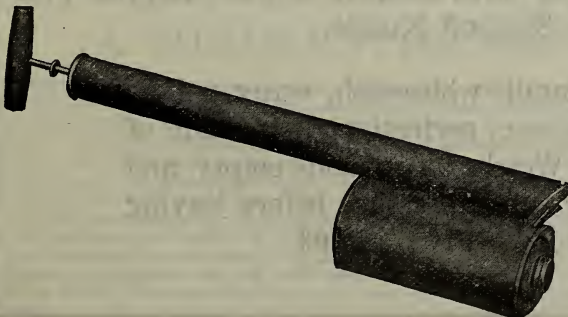
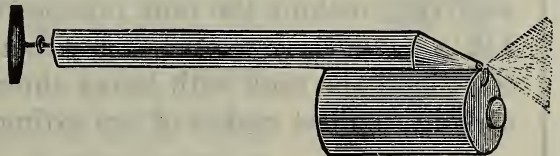
For small gardens, chicken houses, and to use in applying Fly Killer, etc. Holds one quart. Made in tin only. **Each, 40c.**

Our No. 10 Sprayer

A single action sprayer of heavy tin, made to fill calls for a low cost sprayer to use in gardens, plant houses and for applying stock dips, fly poisons, etc. Not a cheap sprayer, but a good sprayer at a low price. Holds one quart.

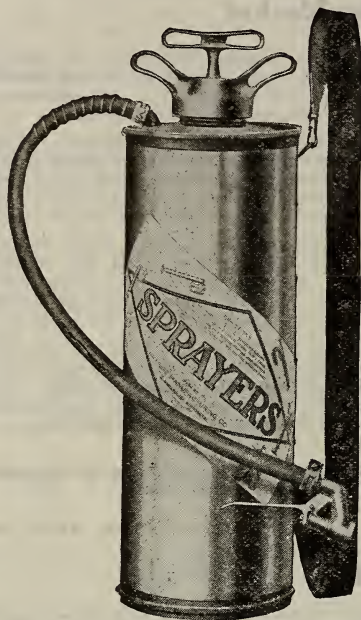
Every sprayer is fully tested before leaving the factory. Full directions on each machine.

Price, 50c each



Our No. 11 sprayer is a handy sprayer, and is made with *slanting air chamber* as shown in cut, which enables the operator to spray up or down in any direction desired, which is necessary in many cases. It is also provided with our patent spring expander which keeps the plunger leather open and prevents it from drying up or becoming wrinkled. It has two brass tubes extending into the reservoir, and gives a fine mist spray which covers a radius of 2½ feet. **Price, each, 50c.**

THE "Perfection" Sprayer



At the left is shown a cut of the new cylinder type of Sprayer that has been added to our line during the past season. In bringing out this Sprayer and offering it to the trade we do it with a full knowledge of the many difficulties to be overcome in building a Sprayer of this type. First in this is the question of strength and durability combined with ease of operation, range and character of work

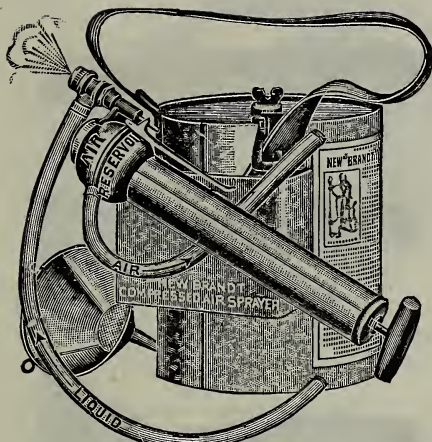
necessary in a Sprayer that can be sold at a moderate price. A poor Sprayer is dear at any price, a good one is cheap.

Our tanks are made of heavier metal than has ever been used in Sprayers of this kind, are lock seamed at the corners to convex heads of metal two gauges heavier than the sides, a single double fold seam runs lengthwise of the tank. This seam is reinforced by six rivets, making the tank practically unbreakable. The pump is 1¾ in. Seamless Brass Tubing with a brass valve, and is sealed into the top of the tank with heavy threads following the construction used in the best makes of fire extinguishers.

The Hose is ¾-in, 4-ply cloth inserted and is equipped with our well-known Automatic Shut-off Nozzle.

This Sprayer will handle whitewash, water paints, Bordeaux mixtures, etc., perfectly. It is made of Galvanized Steel. Weighs 9½ pounds empty and is tested with 50 pounds pressure before leaving the factory. Price, \$5.00.

The "Brandts" Sprayer



In offering the "Brandt" Sprayer to our customers, we do so with the knowledge that we are offering the finest and best sprayer on the market. They are very simple and will not get out of order, and are guaranteed to give satisfaction. These sprayers have been tested and highly endorsed by all the leading Experiment Stations in the United States, and are now used by the United States Government.

The largest size has a patented device for maintaining an even and high pressure, which is absolutely necessary to obtain a satisfactory spray. One stroke will spray 20 hills of potatoes or same number of similar plants, therefore its labor saving powers cannot be surpassed. Will spray a row of vegetables one mile long with one filling, and are especially adapted for fast work.

Uses—Sprays paris green, Bordeaux mixture, sulphate of iron for killing weeds, white arsenic, tobacco infusion, stock dip and all other liquid applications, also for whitewashing and disinfecting poultry houses, barns, cellars, etc.

DESCRIPTION.

The Tanks are made of heavy brass or galvanized steel and will not rust or corrode. Are tested with

four times more pressure than used for spraying, and will not burst. Filler plug and connections are made of brass. The shoulder strap and body rest makes it easy and convenient to carry. Capacity, three gallons.

The Pump has a brass air reservoir. In the plunger is a check valve for the air to pass through on return stroke, making it easy to operate and doubling its capacity.

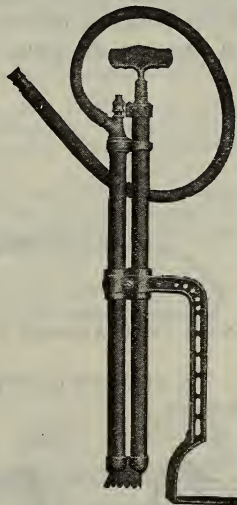
The Nozzles are made on a new principle and work with a combination of liquid and air which produces more force with 7 lbs. of pressure than others do with 100 lbs.—giving a fine mist-like spray, which is sent out with such force that clogging is impossible.

Price, \$5.50 each

No. 26 "Lightning" All-Brass Spray Pump

This pump is constructed entirely of brass, a material not affected by the poisonous arsenites used in different formulas for spraying fruit trees, vines and shrubbery. All labor is done on the downward stroke. It is provided with a large air chamber and brass ball valves. The pressure is held uniformly in the air chamber and on the hose, so that the nozzle throws a continuous spray, and is not affected by the movement of the plunger. The operator is enabled to keep a constant pressure on the nozzle of from 50 to 100 pounds, with very little exertion. The plunger is worked very slow, and at the same time the nozzle produces a continuous spray. Will throw a solid stream 50 feet, which is of unusual value for spraying trees, shrubbery, washing windows, buggies, extinguishing fires, sprinkling lawns, flowers, etc. The pump is furnished with three brass nozzles, which will give any size spray or stream desired. These are interchangeable. The stirrup is malleable iron (not cast iron), and is adjustable so that the pump will fit any pail or bucket. There are no parts to get out of order. The pump is very strong in every respect. The dimensions are as follows: Length of brass tubing, 20 inches; length over all, 26 inches; diameter of tubing, 1 1/4 inches; length of hose, 36 inches.

Price, \$2.50 each



A VALUABLE VETERINARY BOOK FREE

A little book which our readers have seen mentioned frequently in advertisements and in live stock discussions, called the "Zenoleum Veterinary Adviser," holds much that is of interest to farmers and stockmen whether owners of few or many animals. It is valuable because it gives methods of treating along lines of the commonest troubles that all classes of live stock are heir to. The book is carefully indexed, and was designed primarily to show the relation of the celebrated Zenoleum Animal Dip and Disinfectant to domestic husbandry economy. Zenoleum has come to be a very popular thing among owners of live stock in every state in the Union, in Canada and other foreign countries. Its standing among high authorities appears from the fact that Forty-six Agricultural Colleges unhesitatingly give it their recommendation.

The Zenoleum Veterinary Adviser shows in their own words, just what the Professors and various directors connected with these institutions have said of it, and the suggestions they offer for its use. The most important fact is that the book is more conclusive than merely stating the uses of Zenoleum. It gives many descriptions of diseases and ailments, their causes and symptoms, etc., that could hardly be had in such compact and reliable form in any other book we can now call to mind. There are sixty-four pages, splendidly printed in large readable type, and well bound in a serviceable cover.

The Standard Spray Pump

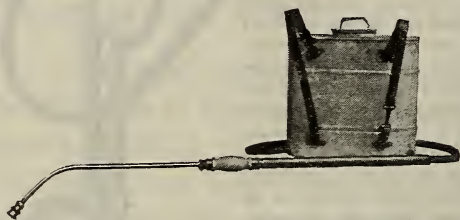


The Standard Spray Pump is in reality simply a very carefully designed and accurately made "Squirt Gun," provided with a proper outfit of nozzles.

Its plan of operation is slightly different from other types of spraying apparatus since the hose is used on the suction end instead of the discharge end. This makes it possible to use the pump with a bucket, barrel, tank or knapsack, depending upon the number of trees or the kind of spraying to be done.

For bucket use a $3\frac{1}{2}$ foot length of hose is supplied. To use it with barrel or tank for a large orchard, a longer hose up to 25 or 30 feet is desirable.

For spraying young or scattered trees or truck crops such as potatoes, tobacco, etc., the knapsack and short extension are used. With these attachments, the Standard will spray potatoes one row at a time at the rate of an acre an hour or better.

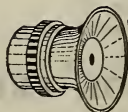


Standard Pump with "Potato" Extension and No. 3 Nozzle Attached to Knapsack.

The Standard is provided with a set of three nozzles.



No. 1



No. 3



No. 2

THE NOZZLES

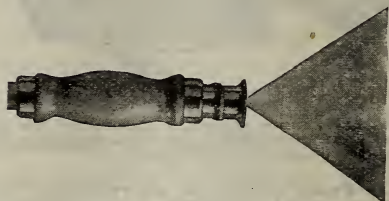
The cuts below show the different kinds of spray produced by different combinations of these nozzles.



With No. 1 Nozzle



With No. 1 and No. 2 Nozzles.



With No. 3 Nozzle.



With No. 2 Nozzle.

WHAT THE STANDARD WILL DO.

Spray orchards large or small.
Spray vineyards and bushes.
Spray Potatoes and all truck crops.
Spray whitewash.
Spray cattle dip and disinfectants.
Spray the tallest fruit tree FROM THE GROUND.

Saves OVER HALF THE TIME and does its work thoroughly.

The Standard is made entirely of Brass. No Leather Packings. No Iron Castings to rust or decay. Nothing to get out of order.

WARRANTED FOR FIVE YEARS.

PRICE LIST.

The Standard with $3\frac{1}{2}$ feet hose and full set nozzles, each.....	\$5.00
Knapsack attachments, each.....	3.00
Extensions, 19 in. long, each.....	.50
Extra hose, per foot.....	.12

Mr. J. J. Butzer,
Portland, Ore.

Dear Sir:— Enclosed is Portland exchange for three dollars and fifty cents (\$3.50) to cover my account with you. Please pardon my negligence in paying this bill — due to my absence from home.

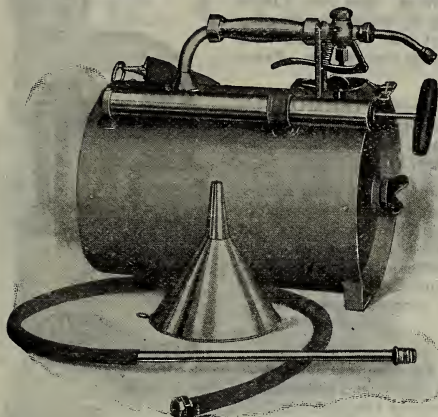
Please accept my thanks for the excellent plants sent me. In a good many years ordering from Portland I have never had such strong, fine plants as these. Not one even wilted and all are most satisfactory

Yours truly,

ELIZABETH L. LONG.

The Dalles, Ore., July 11, 1913.

Lowell Fountain Compressed Air Sprayer



Patented December 3, 1901

NOTE THESE EXCLUSIVE POINTS

1. It is devoid of complex or intricate parts and is the easiest understood Compressed Air Sprayer in the world.
2. It is both automatic and positive in its action.
3. One charge is sufficient to expel entire contents of tank.
4. Each sprayer is thoroughly tested with both air and water pressure.
5. Machine can be easily washed and aired after using.
6. It is so simple in construction that a child can operate it.

Tree attachment and funnel, for filling, with brass wire strainer with each machine. Strongest Air Pressure Sprayer made—will stand five times the air pressure necessary to operate. Convex heads, seamed and soldered. Capacity of tank, 3 gallons. Handy to carry; shoulder strap with each machine.

No. 110.—Galv. Steel, Aluminum finish.....\$4.50

In operation, the piston, which has a 12-inch stroke, forces the air through the check-valve and air tube into the tank. The air tube is fitted with needle-point shut-off cock, which both prevents any back pressure after pumping up, or any moisture reaching the working parts of the pump. No other sprayer has this important feature.

It is the strongest small tank sprayer ever made, being constructed of heavy sheet brass or galvanized steel.

No other sprayer made will stand one-half the pressure. Every sprayer when completely assembled is tested by air to 60 pounds to the square inch, while the pressure in service never exceeds 35 pounds, no safety valve or indicator is needed with the Lowell Fountain Sprayer.

The heads are convex, and are formed on a true circle so that the air resistance is the same at all points. It is impossible to blow them out. The heads are flanged up to lap the body, to which they are securely riveted. These end joints are still further secured by turning the ends of the body over the heads, making a smooth, round finish, after which each end is set in flowing solder until every minute end is filled with the hot metal and the entire tank made both air and water tight.

The Discharge Pipe extends down through the tank to the very bottom of the solution. As the sprayer is carried for service, it reaches the last drop and expels it if needed. The pipe carries the solution under the air pressure to the Automatic Controlling Valve through which it reaches the spraying nozzle. The arranging and grouping of these parts gives the Lowell Fountain Sprayer several of its greatest conveniences.

The Carrying Handle incases part of the discharge pipe. The automatic Controlling Valve is directly in front, which brings the Controlling Lever of the valve directly under the handle, so that is easily operated with one finger.

SPRAYING DON'TS

THEY ARE WORTH WHILE

Don't fail to spray every season. It is impossible to determine in advance whether or not the plant or tree will be attacked. Proper spraying is never injurious.

Don't fail to follow carefully a scientific spray calendar and formulas. If you do not it would be better not to spray, as you are liable to do more damage than good.

Don't spray once in the season and expect to see much result. Spray repeatedly and you will be sure to appreciate the result when you gather the crop.

Don't wait until the fungi have attacked plant or tree; the fungicides are merely preventives and should be used early in the spring. After the disease has developed, it may be too late to save the plant.

Don't spray during or just after a shower, or when there has been a heavy dew. Much of the solution will be washed off or it will collect in spots. Wait till the leaves are dry. Poison is more effective when applied to the leaves when dry.

Don't spray on the top of the leaves only; spray the under sides where the pests hide, and be particular to keep your fluid thoroughly agitated.

Don't give up spraying because you do not think you see any benefit from your work. Perhaps you did not spray early enough to prevent the damage, perhaps you did not use the right formula or were not careful in its preparation, perhaps you did not spray thoroughly or often enough. Try again.

Don't put your sprayer away after using it, until you have thoroughly cleaned out all the spraying mixture. If this is left in, the pump will be injured and the glands and valves clogged.

Don't start out to spray until you have carefully examined your sprayer to see that it is in good working order.

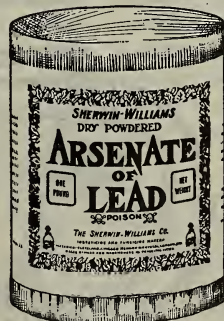
Don't leave your sprayer where it will freeze, unless all the liquid has been drained from it. If liquid is frozen in the pump, it is liable to break or expand the cylinders, so the pump will not work.

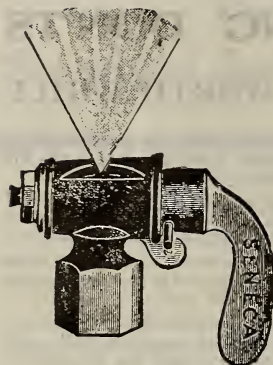
Don't spray only the trees from which you expect to get marketable fruit. Spray all the trees, otherwise the trees you go to the trouble to spray early in the season may become infected later by the unsprayed trees.

"An ounce of prevention is worth a pound of cure."

SHERWIN-WILLIAMS

New Process Arsenate of Lead is a general insecticide for all leaf-eating insects. It is superior to many other brands on the market, because it contains the arsenic in exactly the right proportion and the proper chemical combination, thus insuring a material that will not injure or scorch the foliage but is sure death to insects feeding on the leaves. It is extremely miscible in water and will combine readily with Lime-Sulfur and Bordeaux Mixture. Light in gravity, it remains well in suspension so that a uniformly poisonous spray can be thrown from the finest nozzle. For prices and further information on this product, write.





No. 1

No. 1. "VERMOREL" spray nozzle with degorger affords a conical discharge, adapting it for close range spraying of vines, trees, etc. It is readily cleaned in operating by pulling or pressing the degorger against limb of tree, or pressing with thumb. A very popular nozzle everywhere. Price 75c.

No. 2. TWO-DISCHARGE "VERMOREL" nozzle covers twice the surface sprayed by the single nozzle. It is without doubt the best nozzle for general orchard work. Price, \$1.50.

No. 10 "SENECA" spray nozzle gives a very wide spray, covering a great area. The discharge can be easily graduated. The nozzle may be cleaned by turning plug across the opening. The discharge is fan-shaped, and can be instantly shut off when not required, thus preventing waste of liquid. Recommended for orchard work. Price, 75c.



No. 15

No. 20. BORDEAUX SPRAY NOZZLE. Use this nozzle for whitewashing. Will throw a fine fan-shaped spray, and will readily free itself, should it become clogged, by turning the cock-handle. It will throw a solid stream or may be shut off altogether, as desired. It is especially recommended for use in connection with the Bordeaux Mixture. Price, 75c.

No. 15. GLOVE VALVE. Can be used on any of our pumps for closing off one nozzle at a time; $\frac{1}{4}$ inch round. Price. 65c.

No. 18. BRASS "Y" is cut $\frac{1}{4}$ -inch female thread on inlet, and $\frac{1}{2}$ or $\frac{3}{4}$ -inch male thread on lateral discharges. Price, 75c.

No. 40. NOZZLE COUPLING AND HOSE STOCK. Price 25c.



No. 40

No. 50. NOZZLE AND HOSE COUPLINGS. Price, 25c.

No. 55. BRASS YERDON'S BANDS, $\frac{1}{2}$ or $\frac{3}{4}$ -inch. Post-paid, each, 5c; per doz., 50c.

No. 56. COUPLINGS—

$\frac{1}{2}$ or $\frac{3}{4}$ -inch Postpaid, 25c.
1-inch Postpaid, 30c.
 $1\frac{1}{4}$ -inch Postpaid, 50c.



No. 10.



No. 20.



No. 18



No. 50

BAMBOO EXTENSION—Has iron pipe inside of bamboo. Has stopcock or Globe valve fitted for $\frac{1}{4}$ -inch pipe. Other end cut $\frac{1}{4}$ -inch pipe thread to fit our spray nozzles.

	Bamboo	Iron
2 to 4 feet, with Globe valve	\$1.25	\$0.90
6 feet, with Globe valve	1.35	1.00
8 feet, with Globe valve	1.50	1.10
10 feet, with Globe valve	1.65	1.20
12 feet, with Globe valve	1.80	....



No. 56

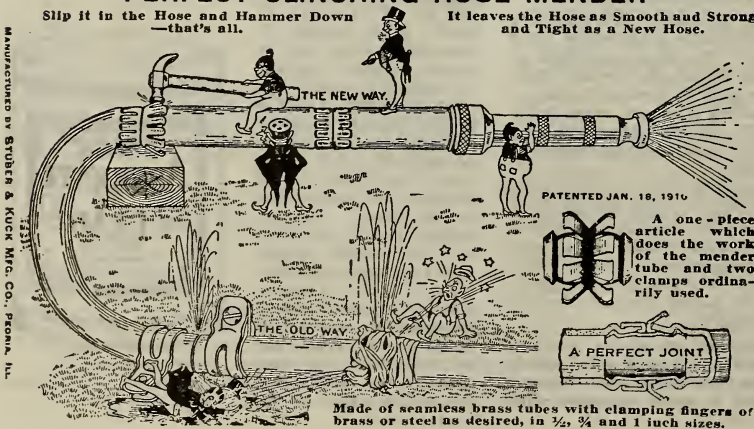


No. 55

PERFECT CLINCHING HOSE MENDER

Slip it in the Hose and Hammer Down—that's all.

It leaves the Hose as Smooth and Strong and Tight as a New Hose.



Made of seamless brass tubes with clamping fingers of brass or steel as desired, in $\frac{1}{2}$, $\frac{3}{4}$ and 1 inch sizes.

HOSE WASHERS
— $\frac{1}{2}$ -inch, per dozen, 10c.

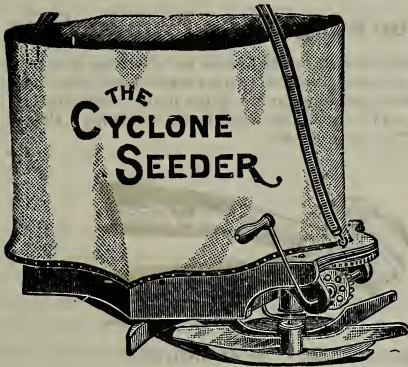
GRAFTING WAX
— $\frac{1}{4}$ lb., 10c; $\frac{1}{2}$ lb., 20c; 1 lb., 35c; postage, 18c per lb.

RAFFIA—For tying plants and bulbs. Per lb., 25c; by mail, 50c.

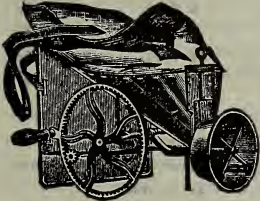
The best mender made, 15c each; $\frac{1}{2}$ for 25c, postpaid.

THE CYCLONE SEED SOWER

A VERY POPULAR SEEDER AND EXTENSIVELY SOLD



This Sower is guaranteed to distribute seed perfectly even and will not throw seed in an upward direction or against the operator, but direct and evenly to the land. Sows clover, timothy, red top or herds grass, alfalfa, oats, rye, wheat, millet, buckwheat turnip and other varieties of farm seeds. It also distributes bone dust, land plaster and fertilizer to advantage. Clover seed is sown to a width of 18 feet, timothy, 15 feet, alfalfa 20 feet, wheat 25 feet, millet 18 feet, and oats 18 feet, etc. Full directions on each machine. Thus it will be seen that one operator can sow from 40 to 60 acres per day, according to the kind of seed. Price, \$2.00 each.



CAHOON

CAHOON SEEDER

Larger in size than the Cyclone Seed Sower and will distribute the seed over a slightly larger area. One of these machines will last a life time. It will seed evenly, 4 to 6 acres an hour. It will scatter the following distances; wheat, barley, rye, 25 feet; clover and timothy, 18 to 20 feet. The bag and hopper hold about 22 quarts. Weight, 5 1/4 lbs. Price, each, \$3.00.

THE EUREKA SEED DRILL

This little handy garden drill is designed only for small gardens, hot-beds, etc., and is not expected to be used for extensive planting like the large drills. It is offered at a very low price and for the purpose intended will do the work well and give satisfaction. You can get close up to the sides of your hot-bed with this drill and save filling in by hand the ends of the rows. Price, each, \$1.25.



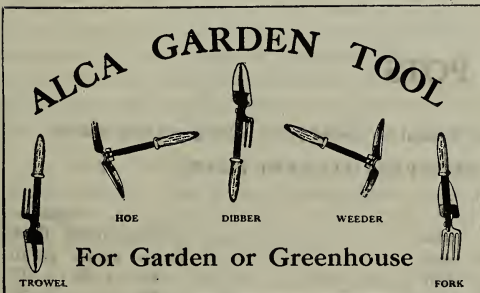
Eureka.

While weeding, digging and planting and transplanting flowers and plants, you are saved the annoyance of missing tools. Your five-fold paraphernalia consists of a handy combination tool made of the best selected material,—stout and compact,—still occupying a small space and weighing less than a pound.

A spring releases the particular tool you desire and the fret and worry of handling 5 separate tools is avoided.

The price is 50 cents for the whole combination, postpaid.

You can easily figure out, what you save in cost, energy and temper.



THIS IS A REMARKABLE COMBINATION
5 TOOLS IN ONE



Pruning Shears.

No. 30—9-inch California pattern; black finish, polished blade. Each, 50c. Postage, 15c.



Garden Trowel, 25c., postpaid.



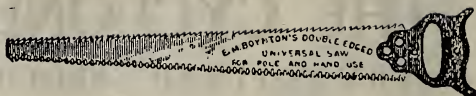
Excelsior Weeder Hook, 20c. each, postpaid.



Hazeltine Hand Weeder and Scraper, 25c. each, postpaid.



Powder Duster—Can be used for sifting on any powder insecticide. Perforated bottom. One-half gallon size, each, 50c.



Boynton's Lightning Pruning Saw

Holes are provided in the handle for attaching to a pole for screws or bolts, to use in cutting higher branches. The lightning teeth are used for the larger limbs, while the fine teeth are used for cutting the small limbs and twigs. Price, 18-inch, 75c; 20-inch, 85c.



24-inch, 85c; 26-inch, \$1.00; 41-inch, \$1.25



6 feet..... 65c
8 feet..... 75c
10 feet..... 85c
12 feet..... \$1.00

Purchaser will have to pay freight or express charges. Cannot go by mail.

JAPANESE TUBS



Japanese Tubs—These tubs have large hoops, and are imported from Japan. Small size, 13 inches high, 14 inches diameter at top, 60c, each; medium size very scarce and hard to procure. 17 inches high, 18 inches diameter at top, \$2.50 each. Large size, 21 inches high, 22 inches diameter at top, \$1.50 each. Special prices on large quantities.

FLOWER POTS

The wholesale trade, florists and nurserymen are requested to send for special prices, stating quantity wanted.

FLOWER, FERN, AZALEA POTS OR BULB PANS (ALL SAME PRICE).

Size			Saucers.		Size			Saucers.	
	Each.	Dozen	Each			Each.	Dozen	Each	
2 inch	\$0.02	\$0.20			8 inch	\$0.15	\$1.75	\$0.10	
3 inch .....	.03	.30			9 inch .....	.23	2.50	.15	
4 inch .....	.04	.40	\$0.02 ½		10 inch .....	.40	....	.20	
5 inch .....	.06	.60	.04		12 inch .....	.60	....	.35	
6 inch .....	.10	.90	.05		14 inch	1.50	....	1.00	
7 inch .....	.12	1.20	.07 ½		16 inch	2.25	....	1.25	

NOTE—At above prices we will pack the pots carefully, but buyer must pay freight or express charges.

Concentrated Manures and Fertilizers

MARKET GARDENING.

The value of Commercial Animal Fertilizers to the market gardener cannot be overestimated. Compared with the results secured by the use of Fertilizers, their cost is insignificant. They greatly increase not only the yield, but also its quality, and, what is of immense importance, they push the crops rapidly forward to maturity, getting them into market early, and thus insuring a better price.

THE YIELD AND QUALITY OF VEGETABLES DEPEND UPON CONTINUOUS AND RAPID GROWTH.

It has been demonstrated that market-garden crops of the best quality are those which are grown under conditions which permit of a continuous and rapid development. Any delay in the growth of a lettuce or radish causes that sharp and pungent flavor of the former and the bitterness and toughened fibre of the latter, beets become stringy, etc. Plant food of the right amount and kind controls the yield and quality of market-garden products more than any other condition, and it is neither wise nor economical to depend on the natural condition of the soil or the application of stable manure only for profitable crops.

Pure Bone Meal—Pure Ground Bone, fine ground, is one of the best fertilizers. This is the only grade of Ground Bone we are now manufacturing, and is all pure bone, reduced by improved machinery to an even fineness—nothing is added, and is free from any adulterant. This is a very valuable enricher of the soil. Price, 5 lbs., 25c; 10 lbs., 35c; per 100 lbs., \$1.75.

Superphosphate—This is a concentrated form of phosphoric acid and it is actually the cheapest form in which to buy phosphoric acid. Our present stock contains 17 per cent available phosphoric acid. Per lb., 5c; 100 lbs., \$1.50; ton, \$25.00.

Blood Meal—Pure Blood, cooked, dried and finely ground. A quick-acting fertilizer, analyzing very high in effective nitrogen; in fact, the nitrogen of Dried Blood is one of the most effective forms of organic nitrogen known. This also carries some phosphorus; is a strong fertilizer, a little going a long way. Price: 5 lbs., 30c; 10 lbs., 50c; 100-lb. sack, \$3.50.

Fish Guano—Fish scraps, cooked, dried and ground, is a strong fertilizer, high in nitrogen, carrying considerable phosphorus and used largely by vegetable growers. We do not recommend this for lawns or city use, as odor is objectionable and particles picked up by dogs have been known to poison them. Price: 100 lbs., \$2.25; ton, \$42.00.

Land Plaster, or Gypsum—Made from pure gypsum, absolutely free from clay or other foreign matter. This is especially valuable for clover crops. Price: 10 lbs., 25c; 100-lb. sack, 75c; ton, market price.

Note—As fertilizers are sold on a small margin, prices are subject to market changes.

We have a Fertilizer booklet giving full instructions as to how much fertilizer, when and what kinds, to use on the different crops, etc. Sent free.

Muriate of Potash—A form of Potash Salts to be used with Bone Meal, Bone and Blood or farm manures on fruits, celery, asparagus, corn, oats, turnips, cucumbers, grapes, carrots, onions, peas, clover and beans. Must not be used on hops, potatoes, tobacco, flax, sugar beets, cabbage or cauliflower. 40 to 50 pounds per acre. Price: 100 lbs., \$4.10; per 224-lb. sack, \$8.25; 2,000 lbs., \$73.00.

Sulphate of Potash—A desirable form of Potash to be used on all crops, but especially on tobacco, hops, potatoes, flax, sugar beets, cabbage or cauliflower. Use 50 to 400 lbs. per acre. Price: 100 lbs., \$4.85; 224-lb. sack, \$9.35; 2,000 lbs., \$80.00.

Kanit, or German Potash Salt—This contains on an average of 12 per cent of actual potash. It should be applied a considerable time before the crop is planted in order that it may be well distributed. It is not advisable to put it in the hill or row immediately before planting. Mixed with Bone Meal, it is a splendid fertilizer as a top dressing for fruit trees and small fruits. Price: 10 lbs., 30c; 25 lbs., 50c; 100 lbs., \$1.50; 500 lbs., \$6.00; 1,000 lbs., \$11.00.

Nitrate of Soda, or Chili Saltpeter—Nitrate of Soda is not a substitute for other manure, but we recommend it as the cheapest and best form in which to apply Nitrogen to plants. Gardeners who are using farm manure should continue to use it, but use Nitrate of Soda in addition to other fertilizers. If your object is to grow maximum crops you must in some way furnish the plants with nitrate. No matter what manure or fertilizer is used the Nitrogen must be converted into Nitrate before the plants can use it.

Price (subject to market changes): 5 lbs., 30c; 10 lbs., 50c; 25 lbs., \$1.00; 100 lbs., \$3.50; 500 lbs., \$16.50. Write for prices on larger quantities.

HOW TO USE NITRATE OF SODA.

The lumps in this should be removed by sifting, they should be broken up, which is easily done by pounding.

For Asparagus—A top-dressing of 250 lbs. per acre just as soon as the first shoots make their appearance.

For Beets—A top-dressing of from 50 to 100 lbs. per acre once every week or ten days for at least three or four weeks after the plants have well started.

For Cabbage and Cauliflower—A top-dressing of 100 lbs. per acre after the plants have begun to make growth after transplanting, and 200 lbs. per acre more after the heads begin to form.

For Cucumbers for Pickles—A top-dressing of 100 lbs. per acre after the plants begin to run.

For Celery—Frequent and reasonably heavy top dressings of 100 lbs. per acre or more well worked into the soil after the plants are established.

For Egg Plant, Spinach and Lettuce—A top-dressing of 100 lbs. per acre after the plants are well started.

For Onions—A top-dressing of from 75 to 100 lbs. two or three times at intervals of about three weeks, after the crops have well started.

For Strawberries—A top-dressing of about 100 lbs. per acre after the plants have blossomed.

TO SUCCESSFULLY GROW

ALFALFA, CLOVERS, COW PEAS, SOY BEANS, VETCHES and other legumes, to increase the yield, and to improve the soil, use

THE MULFORD NITRO-GERM

Scientifically Prepared and Tested

SMALL COST-LARGE RETURNS-EASY TO USE-NO LABOR EXPENSE



The Mulford Nitro-Germ consists of pure, tested cultures of active, vigorous nitrogen-fixing bacteria, for inoculating seeds of legumes or soil.

Legumes offer the best known means of maintaining soil fertility and rejuvenating over-cropped and worn-out fields.

The U. S. Department of Agriculture and many State Agricultural Experiment Stations recommend inoculation of legumes with nitrogen-fixing bacteria to induce a prompt "catch" and increase the yield.

The Mulford Nitro-Germ is prepared and tested by experts, in the biological laboratories of H. K. Mulford Co., Philadelphia, U. S. A., with the same degree of care as Mulford Anti-toxins, Serums, Vaccines, etc., which are standard all over the world.

Be sure to always specify the particular legume for which The Mulford Nitro-Germ is desired, otherwise we will not know how to fill your order.

ALFALFA [Lucerne]
CRIMSON CLOVER
SWEET CLOVER
WHITE CLOVER
RED CLOVER
ALSIKE CLOVER
Mammoth Clover

Burr Clover
Yellow Clover
Berseem Clover
COW PEAS
SOY BEANS
CANADA FIELD PEAS
PEANUTS

SPRING VETCH
WINTER VETCH
Horse Beans
Velvet Beans
Perennial Peas
SWEET PEAS
GARDEN PEAS

GARDEN BEANS
LIMA BEANS
Lupins.
Saintfoin
Beggar Weed
and others

Those printed in CAPITAL LETTERS can be shipped immediately from stock. The others will be prepared to order and can be supplied in a few days.

PRICES.

The Mulford Nitro-Germ is supplied for the varieties of legumes indicated, at the following prices: Garden size [about $\frac{1}{4}$ -acre], 50c; One acre, size, \$1.50; Five acres size, \$5.00. [Not returnable.]

Special prices on lots of twenty-five acres or more on one order, either of one kind or assorted.

Why buy expensive commercial nitrates when you can grow legume crops and thus increase the yield and at the same time replace the nitrates, enrich and renovate the soil by Nature's own method.

Write to-day for free booklet giving valuable information regarding the nitrogen-fixing bacteria and describing the preparation and use of THE MULFORD NITRO-GERM.

NURSERY DEPARTMENT

The few following remarks should be read before making up order.

GUARANTEE OF GENUINENESS.

While we aim to have all our fruit trees true to name, and hold ourselves ready, on proper proof, to replace, free of charge, all stock that may prove untrue to label, or to refund amount originally paid by the customer, it is mutually understood and agreed between the purchaser and ourselves that our guarantee of genuineness shall not make us liable for any sum greater than that originally paid us for such stock as may prove untrue.

Customers will please remember that when our busy season commences we are rushed with orders, and it may be a few days before their orders receive attention; but they may rest assured that there will be no unnecessary delay in shipping.

GUARANTEE. We do not guarantee stock to live, nor will we replace free of cost that which dies or fails to grow, nor can we, in view of the various incidents that the stock is subject to, as the success or failure depends largely on climatic conditions, manner of planting, after care, etc. We do guarantee, however, that our stock will be in a good, live and healthy condition upon departure from our nurseries.

Our customers are requested to notify us immediately of any errors that may be committed in filling their orders so we may at once make ample amends, as we desire to conduct our business in all respects satisfactorily to those who favor us with their orders.

It is requested that explicit instructions for marking and shipping packages be plainly written with each order. Should this be omitted or left to us we will use our best judgment, but in all cases the goods are at purchaser's risk after being shipped, and if delay or damage occurs we will not be held responsible.

Our list of varieties has been cut down to the very best.
As usual, 5 will be furnished at 10 rates; 50 at 100 rates.

DISTANCES FOR PLANTING TREES (In planting trees the greater distance should be given on the richer soils.)

Apples	.....20 to 30 feet each way.
Pears (Standard)	.....20 to 25 feet each way.
Pears (Dwarf)	.....12 to 15 feet each way.
Quinces	.....15 feet each way.
Peaches	.....18 to 24 feet each way.
Plums	.....15 to 20 feet each way.
Cherries	.....15 to 20 feet each way.
Blackberries	.....6 by 4
Raspberries	.....6 by 3
Currants	.....5 by 3
Gooseberries	.....5 by 3
Strawberries (Hills)	.....36 by 18 inches.
Strawberries (Matted rows)	..48 by 12 inches.
Grapes	.....8x8 to 10x12 feet.

NUMBER OF PLANTS PER ACRE AT VARIOUS DISTANCES.

Distance, Inches.	Plants.	Distance, Inches.	Plants.	Distance, Feet.	Plants.	Distance, Feet.	Plants
1x 1	6,272,640	10x48	13068	4x 5	2178	9x10	484
1x 3	2,090,880	15x15	27878	4x 6	1815	9x11	440
1x 4	1,568,160	15x30	13939	4x 7	1556	9x12	403
1x 5	1,254,528	15x36	11616	5x 5	1742	10x10	435
2x 2	1,568,160	18x36	9680	5x 6	1452	10x12	363
2x 3	1,045,440	18x48	7260	5x 7	1244	10x15	290
2x 4	784,080			5x 8	1089	10x18	242
		Feet.					
2x 5	627,264			5x 9	968	10x20	217
3x 3	696,960	1x 1	43560	6x 9	1210	12x12	302
3x 4	522,720	1x 2	21780	6x 7	1037	12x15	242
3x 5	418,176	1x 3	14520	6x 8	907	12x20	181
4x 4	392,040	1x 4	10890	6x 9	806	15x15	193
4x 5	313,632	1x 5	8712	6x10	726	15x18	161
5x 5	250,905	2x 2	10890	7x 7	888	15x20	145
6x 6	174,240	2x 3	7260	7x 8	777	18x18	134
7x 7	128,013	2x 4	5445	7x 9	691	18x20	121
8x 8	98,010	2x 5	4356	7x10	622	18x24	100
9x 9	77,440	3x 3	4840	8x 8	680	20x20	108
10x10	62,726	3x 4	3630	8x 9	605	20x24	90
10x20	31,363	3x 5	2904	8x10	544	20x30	72
10x24	26,136	3x 6	2420	8x11	495	30x24	60
10x30	20,908	3x 7	2074	8x12	453	30x30	48
10x36	16,424	4x 4	2722	9x 9	537	30x36	40

FRUIT TREES

APPLES

	Each	10	100
2-year-old, .....	.20	\$1.50	\$10.00
1-year-old, 3 to 4 ft .....	.10	.90	8.00
1-year-old, 4 to 6 ft .....	.15	1.25	9.00

SUMMER VARIETIES

EARLY HARVEST

Medium size; bright straw color; tender and fine; good for table and cooking. July.

GOLDEN SWEET

Large, pale yellow, tender and rich; good for cooking; fine bearer. August.

SWEET BOUGH

Large, pale yellow, tender and sweet; good bearer; begins young. August.

GRAVENSTEIN

Large, beautifully dashed with deep red and orange; tender and crisp; with a highly aromatic flavor; tree very vigorous. August.

RED JUNE

Medium, oblong, deep red; excellent for table use; one of the best early apples.

RED ASTRACHAN

Large, deep crimson, flesh white, moderately juicy, with an agreeable rich acid flavor; very productive. August.

WHITE ASTRACHAN

Greenish white, very showy, constantly growing in favor where known. Late July.

YELLOW TRANSPARENT

Medium size, roundish, slightly conical; skin pale yellow; flesh tender, juicy, sub-acid; good; bears at an early age. July.

AUTUMN VARIETIES

ALEXANDER

Large, conical; greenish-yellow, streaked with orange and bright red in the sun; flesh yellowish white of medium quality; very hardy and productive. October.

DUCHESS OF OLDENBURG

Large, yellow streaked with red; tree vigorous and very productive; juicy, with rich sub-acid flavor. September.

FAMEUSE

(Snow Apple.) Medium, roundish, greenish yellow, with streaks of deep red on sunny side; flesh remarkably white; fine dessert fruit. October to December.

RED BELLFLOWER (Marshall's Red)

Oblong, brilliant red; very good. October to December.

FALL PIPPIN

Yellowish green; good cooking apple. September.

GLORIA MUNDI

Large green, fine sauce apple. Last of September.

RED BEITIGHEIMER

Very large; cream colored, flushed with red; fair quality. September.

MAIDEN'S BLUSH

Medium, well shaped; yellow, with a very distinct red cheek on the sunny side; flesh white; pleasant sub-acid flavor; excellent for table or cooking. September.

RAMBO

Medium, yellowish white, streaked yellow and red; tender, rich and sub-acid; very productive. September to November.

PUMPKIN SWEET

Tree moderate grower. Fruit large, mellow and sweet; fine baking apple. First of September.

TWENTY OUNCE

Large and showy; good, though not highly flavored; flesh coarse, brisk sub-acid. October.

WAXEN

Fruit medium; skin pale yellow; flesh crisp, tender, juicy, sharp acid; one of the best for drying. October.

GOLDEN RUSSET

Medium, dull russet, with a tinge of red-flesh crisp, juicy and highly flavored. September.

DWARF FRUIT TREES

Make profitable "fillers" for young orchards and are best for Home Gardens. Our stock is large—varieties and quality the finest.

These are ideal for home gardens; come into bearing early and yield large crops of choicest fruits. Forty Dwarf Trees can be planted in a space 50 feet square and will not shade the ground, which can be cultivated between the trees. For best results Dwarf Trees must be planted in good rich soil and be well cared for; they should be pruned back about two-thirds of their new growth each spring.

DWARF APPLES

Baldwin	Jonathan	Spitzenberg
Red Astrachan	Gravenstein	
Bismarck	Rome Beauty	Wealthy
	Yellow Transparent	

DWARF PEARS

Bartlett	Fall Butter	Comice
Beurre de Anjou	L. B. de Jersey	
	Shelton	

Price, each, 50c; 10, \$4.00; 100, \$35.00

APPLES — Continued**WINTER VARIETIES****ARKANSAS BLACK**

Medium, round; yellow where not covered with a beautiful dark maroon, approaching black; flesh firm, fine grained, juicy; a long keeper. December to April.

BALDWIN

Large, rounded; deep, bright red; very productive; crisp, fine flavor; one of the best and most popular winter apples. November to February.

BEN DAVIS

Medium to large; yellowish, overspread with red; flesh white, tender, juicy; pleasant sub-acid; thrifty, upright grower. October to January.

LAWVER

(Delaware Red.) Large, rounded flat, mild sub-acid, very heavy and hard; dark red; handsomest late keeper. December to May.

ORTLEY, OR WHITE BELLEFLOWER

White fleshed, fine grained conical fruit of superior flavor; one of the best. December to April.

HYDE'S KING OF THE WEST

Large to very large; handsome yellowish green; good quality; a remarkable keeper; a very popular sort in some sections. November.

ROXBURY RUSSET

Medium, dull green and russet; flesh greenish white, rich sub-acid flavor. October to January.

RED CHEEK PIPPIN

Excellent variety; sub-acid flavor; yellowish green color; red cheek; large size; good bearer. Keeps till March.

SPITZENBERG

Large, oblong; yellowish ground with broken stripes of bright red; flesh yellowish, juicy, delicious rich flavor. November to March.

YELLOW BELLEFLOWER

Large, oblong, yellow, sometimes a blush in the sun; flesh firm, crisp, juicy, sub-acid; tree a good grower and very productive; succeeds well in this valley. October to January.

WAGENER

Good size; deep red in the sun; flesh firm and fine grained; good keeper; sub-acid; excellent filler; requires thinning. October to December.

STARK

Large, greenish yellow, shaded and splashed with dark red; flesh yellowish, juicy, mild sub-acid; a long keeper and profitable market fruit; thrives in California. December to March.

TOLMAN'S SWEET

Medium size, pale, whitish yellow, tinged with red; flesh firm; rich and very sweet; best to preserve; vigorous, productive. November to April.

KING

Large and handsome, striped red and yellow; tree vigorous and productive. November to December. Good mountainous apple.

JONATHAN

Tree vigorous, long lived and an early bearer. Fruit beautiful red and oblong; fine quality. Valuable as a pollenizer with Spitzenberg and Newtown. October to January.

SWAAR

An old standard. Lemon yellow, fine grained and tender. Excellent for warm, dry climates. December.

MAMMOTH BLACK TWIG

Very large; bright red, pleasant sub-acid; fine late keeper; fine, vigorous tree. November to January.

NORTHERN SPY

Large, round, greenish yellow, stripes of purplish red; flesh white, juicy, brisk sub-acid; valuable for "top work." Requires good soil. December.

RHODE ISLAND GREENING

Large, greenish yellow; flesh yellow, fine grained, tender, crisp, juicy and aromatic; excellent for cooking and table. October.

ROME BEAUTY

Large, yellow, shaded with bright red; juicy and sub-acid; fine market sort; good bearer. November to February.

WEALTHY

Medium, whiteish yellow, shaded with deep red; flesh white, tender and juicy. October.

WINESAP

Medium yellow ground, streaked with red; flesh yellow, with rich, high flavor; excellent for table and making cider. December to April.

WOLF RIVER

Large and handsome; greenish yellow shaded with dark and light red; tree a strong grower and good bearer. September to November.

YAKIMA

Large, bright red; a good sort and very popular in some places. December.

STAYMAN WINESAP

A seedling of the Winesap. Yellow striped with red. Flesh firm, crisp, juicy and very tender and rich, sub-acid. A drought resister; a profitable market variety. January, May.

BLACK BEN DAVIS

Superior to the Ben Davis and Gano. A drought resister; fruit is very handsome, dark in color; of fair quality. October to January.

LADY APPLE

A novel, dainty, small flat apple; red cheek. Good Christmas fruit. Tree upright and vigorous.

APPLES

WINTER VARIETIES—Continued

YELLOW NEWTOWN PIPPIN

Large; skin smooth, golden yellow; flesh firm, crisp, juicy; one of the standard varieties for export. December to May.

GRIMES GOLDEN

Very popular. Rich golden yellow; flesh tender, juicy and rich. Tree hardy and vigorous, bearing young. November to December.

DELICIOUS

A splendid apple; coming into prominence rapidly. Tree vigorous and hardy and the fruit equals the name in every respect. Fine for market and home use and especially adapted to Eastern Oregon and Washington. Keeps till April.

We can supply many other sorts not listed above. Write us your wants.

NEW VARIETIES OF APPLES

Note prices following each variety. Nice stocky trees.

WINTERSTEIN

A winter apple of the Gravenstein type; flesh yellowish, very tender, rich, spicy, sub-acid, highest quality, with a flavor all its own. Originated by Luther Burbank, of California, who says: "The tree is about the best grower and bearer we have ever seen." November. Price, each, 60c

OPALESCENT

Probably the handsomest apple ever introduced. Color light, shaded to a very dark crimson; skin smooth; susceptible of a very high polish reflecting objects like a mirror; flesh yellowish, tender, juicy and good. It is not only a beauty, but all right for size, quality and productiveness; qualities rarely combined in one variety. Price, each, 60c

BISMARCK

The apple novelty; everyone should try it; tree of short, stocky growth, thick, healthy foliage; fruit large, handsome, yellowish sometimes shaded red cheek; flesh tender, pleasantly sub-acid; entirely new; seldom failing to bear when two years old. September. Price, each, 35c

CRAB APPLES

Nice stock trees, each, 35c; per 10, \$3.00

FLORENCE

Large, handsome; red striped; early; good annual bearer, juicy and crisp; fine for the home garden. September 1.

MARTHA

Glossy yellow, shaded to red; fine for cooking and fair for eating fresh; tree handsome, vigorous and hardy. September.

TRANSCENDENT

Very large, pleasant flavor and good for cider; yellow striped red. Very productive. Adapted to Montana. September.

KING DAVID

A cross between Jonathan and Arkansas Black. Color deep, rich red. Tree a young and heavy bearer. November to March.

SALOME

Early and annual bearer; very hardy; fruit medium and uniform; quality good. November.

McINTOSH RED

A seedling of the Fameuse; bright red, flesh white, very tender and delicious. Long lived and very productive. Adapted to Montana. November.

GAÑO

Fruit is a bright red on yellow ground, large oblong, smooth. Tree vigorous and prolific bearer. Fine keeper. November to April.

ONTARIO

A cross between Wagener and Northern Spy. Fruit large to very large; flavor a brisk sub-acid, sprightly, slightly aromatic; season mid-winter to late. One of the best apples both for commercial purposes and for home use. Price, each, 60c

CLAYTON

Winter; large, yellow, striped red; productive. December to January. Price, each, 35c

MULTNOMAH (New)

A grand new sort; a hybrid between the American Pippin and Rome Beauty. Originated by H. A. Lewis. Fruit large; color red, striped yellow; flesh white and fine and of sub-acid flavor; extra long keeper and in its prime from February to June; the coming apple for long distance shipment and Oriental trade. Price, each, 60c

WINTER BANANA

Fancy market fruit; pale yellow with pink blush. Has a delightful aroma and suggestive banana flavor. Not a good shipper. November. Price, each, 35c

YELLOW SIBERIAN

Fruit small, fine golden yellow. Good. August.

HYSLÖP

Large, deep crimson; tree hardy, fine for the West. November, January.

RED SIBERIAN

Yellow with scarlet cheek. Bears young and abundantly. September.

WHITNEY NO. 20

Tree thrifty, upright grower. Fruits large, striped; flesh firm and juicy. Very good. August.

APRICOTS

Prices except where noted:

	Each	Per 10	Per 100	Per 1000
First Grade, 4 to 6 feet.....	\$0.25	\$2.25	\$20.00	\$180.00

THE LEWIS

The new Lewis Apricot is the largest, strongest growing, best yielding, best flavored apricot we have ever seen, and is perfectly hardy. Grown extensively in the "Goodnoe Hills" district. July, August.

Price, each, 75c

Special prices in large lots.

MOORPARK

Very large, yellowish green, brownish red on the sunny side; flesh bright orange; fine for canning and drying; freestone. July, August.

ROYAL

Above medium size; sweet, rich, juicy; good dryer and canner. July.

TILTON

Large; rich color, high flavor; very productive; similar to Royal; later. July.

BLENHEIM

Deep orange, sometimes blushed; tender, rich and juicy. Tree vigorous. Good for Pacific Coast. Last of June.

HEMSKIRKE

Large, flesh bright orange; tender, plum like flavor. July.

PEARS

First Grade, 4 to 6 feet, 1 year	Each, \$0.30	Per 10, \$2.50	Per 100, \$20.00
Second Grade, 3 to 4 feet, 1 year .....	.25	2.00	17.00
50 at hundred rate			

SUMMER VARIETIES

BARTLETT

Large; skin thin, clear, lemon yellow, with soft blush on the sunny side; flesh white, buttery, very juicy and highly flavored; the best summer pear in existence. August, September.

SECKEL

Rich and highly flavored; its highly concentrated, spicy, honey flavor is unequaled; skin brownish green, russet brown cheek; flesh whitish, buttery and melting. September, October.

AUTUMN

BEURRE BOSCH

Large, beautiful, russety; highly flavored; fine for shipping. September.

LOUISE BONNE DE JERSEY

Large, greenish yellow, brownish red in the sun, marked with gray dots; flesh juicy, melting; very prolific. October.

COMICE

A splendid commercial variety, being of fine size; good appearance; ships well. October.

KIEFFER

A good shipper and keeper. Large and very handsome; yellow and dotted. Flesh slightly coarse but juicy. October.

WINTER VARIETIES

ROOSEVELT (New)

Size very large, shape roundish. Flesh fine texture, juicy, melting. Ground color yellow, clouded with salmon rose. Season October. Price, each, 75c

WINTER NELIS

Medium; skin yellowish green, dotted with gray russet; flesh yellowish white; fine grained, of a rich saccharine, aromatic flavor. December.

VICAR OF WAKEFIELD

Large, long, green in color; sweet, good keeper; heavy yielding; hardy winter sort.

P. BARRY

Fine keeper. Very large; juicy, fine grained, yellow. December, March.

CROCKER BARTLETT (New)

In shape, oblong, large and of a rich golden color. Skin rather thick but tender; flesh yellowish, buttery, juicy, sub-acid to sweet and very rich. Tree very vigorous, so far unblighted. October.

Price, each, 50c; per 10, \$4.50

KOONCE

Juicy, sweet and fair quality. Resists frost somewhat; tree vigorous. August.

CLAPP'S FAVORITE

Large, pale lemon yellow, marbled with crimson; flesh fine grained and melting, with rich vinous flavor. July, August.

HOWELL

Very prolific, upright. Fruit large and sweet, with a russet-yellow color. August.

MADELINE

Medium, pale yellow; flesh melting and juicy; the first early pear. June.

VARIETIES

FALL BUTTER

A favorite fall pear; yellow, sweet and juicy. September.

BEURRE CLAIRGEAU

Large, yellow, shaded with orange and crimson; covered with russet dots; flesh yellowish, buttery, juicy. September.

BEURRE D'ANJOU

Large, handsome, fine flavor; tree vigorous; heavy bearer; keeps till Christmas. September.

FLEMISH BEAUTY

Large, beautiful, rich and sweet; pale yellow with slight russett. Adapted to Montana and the Northwest. September, October.

WINTER BARTLETT

This fine pear originated in Eugene, Oregon. Fruit large, closely resembling the famous Bartlett in shape and appearance, but ripening considerably later; flavor almost identical with the Bartlett; is undoubtedly one of the few pears of recent introduction of real merit. Price, each, 50c; per 10, \$4.50

BEURRE EASTER

Large, oval, yellow, with red cheek; excellent winter pear; February, October, January.

POUND PEAR

Intensely large; coarse grained, for cooking and preserving. Fair keeper. November, January.

LINCOLN CORELESS

Practically coreless; very late. Fruit should be picked when green. Large, quality good. Fairly hardy and good bearer.

IDAHO

A native of Idaho. Shaped more like an oblong yellow apple than a pear. Delicious flavor. Last of September to December.

CHERRIES

Prices except where noted:

	Each	Per 10	Per 100
First Grade, 2 years.....	\$0.35	\$3.00	\$25.00
Second Grade, 1 year, 4 to 6 feet.....	.30	2.50	20.00

BING

Originated in Oregon, from seed of Black Republican; fruit large, dark brown or black; very fine; late; a good shipping variety; July.

BLACK TARTARIAN

Largest size; flesh purple, crisp, tender and juicy. Late May.

BLACK REPUBLICAN (Lewelling)

Seedling, raised by Seth Lewelling, of Oregon; large size, black, sweet, with purplish flesh; late and a good shipper. June.

KENTISH (Early Richmond)

Dark red, juicy; one of the best sour cherries and unsurpassed for cooking purposes; very productive. Mid-May.

LATE DUKE

Large, light red; late and excellent, sub-acid. Late July.

OREGON

Large, black, solid, free, vigorous and productive; a fine shipper. July.

ROCHALINE (New)

A new German cherry, larger and redder than the Royal Ann; better shipper and more prolific bearer. July. Each, 60c

ENGLISH MORELLO

Large deep red; tree small and slender. July.

MONTMORENCY

Large, sour fruit, similar though larger than the Early Richmond. Quite hardy. May.

GOVERNOR WOOD

Deep yellow, shaded red; good for table and canning. June.

MAY DUKE

Large, rich, dark red; flesh tender, juicy and sub-acid; an excellent variety, and one of the earliest of its class. May.

MILLER'S LATE

This new cherry resembles the Late Duke in color, shape and flavor, but it is a larger and later variety, which makes it very valuable and desirable. August. Price, each, 60c

NEW GIANT

Claimed by the originator to be equal in every way to the famous Lambert, but to possess the good points of being a larger and later cherry. A strong, vigorous grower; heavy cropper. Each, \$1.00; large trees, \$1.50

ROYAL ANN

(Napoleon Bigarreau.) A magnificent cherry of the largest size; pale yellow, becoming amber in the shade; richly dotted and spotted with deep red, and with a bright red cheek; flesh very firm, juicy and sweet; tree a rapid grower and immense bearer. July 1.

MAJOR FRANCIS (Ox Heart)

Similar to the May Duke, though a little more spicy in flavor. Ripens earlier than May Duke.

LAMBERT

Fruit of largest size and of fine quality; color deep, rich red; flesh firm and of fine flavor; a fine market variety; ripens two weeks later than Royal Ann. Mid-July.

QUINCE

Prices except where noted:

	Each	Per 10
First Grade, 4 to 6 feet.....	\$0.50	\$4.00

CHAMPION

Large, yellow; flesh cooks very tender; flavor is most delicious; more productive than the Orange. October.

APPLE OR ORANGE

Well known standard variety; early; large, golden yellow; good for preserving or flavoring. September.

BEA'S MAMMOTH

Large, bright yellow; a strong grower and very productive. October.

PINEAPPLE

Flavor is suggestive of the pineapple; the fruit resembles the Orange quince; making superior jelly; can be eaten raw and has a most exquisite and delicious flavor, not equalled by any other quince. September.

Price, select 1 year, 50c; 2 years, 75c

MEECH

Beautiful yellow, but rather small; not so marketable as some larger sorts. Tree a young and unfailing bearer.

LIME AND SULPHUR SOLUTION — Butzer's Best
The San Jose Scale Killer

PRUNES

	Each	Per 10	Per 100
First Grade, 2 years.....	\$0.20	\$1.80	\$15.00
First Grade, 4 to 6 feet, 1 year.....	.15	1.40	12.00
First Grade, 3 to 4 feet, 1 year.....	.10	1.00	8.00

GIANT

Largest prune known; fruit averaging 1½ to 2 ounces each; retaining the good qualities of the smaller varieties.

HUNGARIAN

Very large dark red, juicy and sweet; good shipper. August.

SUGAR (New)

Tree vigorous grower; early bearer; fruit ripens 28 days before the French; is four times as large and dries in half the time; flesh tender and rich in sugar; color dark purple. Early August.

PACIFIC

Large, sweet; same color as Italian. Good canner or to eat raw. Early August.

PETITE (FRENCH)

Medium, egg shaped; violet purple; sweet, rich and sugary; very productive; standard variety for drying. August.

SILVER

Seedling of the Coe's Golden Drop; tree vigorous and productive; fruit large and superior; excellent for drying or canning. September.

ITALIAN (FELLEMBERG)

Large, oval, tapering at both ends; dark purple; flesh greenish yellow; separates freely from the stone; best for drying. August.

TRAGEDY

Dark purple; flesh yellowish green; very rich and sweet. Early July.

PLUMS

Prices except where noted:	Each	Per 10	Per 100
First Grade, 2 years.....	0.15	1.50	15.00
First Grade, 1 year, 4 to 6 feet.....	\$.15	1.35	12.00

ABUNDANCE

Fruit large and beautiful; bright cherry; flesh light yellow; juicy, tender, sweet; productive; freestone. June.

BRADSHAW

Reddish purple, juicy and pleasant; adheres partially to the stone. July.

COLUMBIA

Largest size, nearly globular; brownish purple; rich, sugary, freestone. August.

DAMSON

Small, oval, bluish purple; flesh melting, rather tart. Tree very fruitful and hardy. August.

DAMSON—SHROPSHIRE

Medium size, dark purple; very firm; flesh greenish, juicy and rich. Vigorous. Late September.

BARTLETT

Yellow, turning to crimson when ripe; flesh salmon colored, firm and juicy. Last of June.

COE'S GOLDEN DROP

Very large; light yellow; sweet and delicious. Late September.

GRAND DUKE

Dark purple; flesh greenish yellow, with rich flavor; fine shipper. Late August.

LOMBARD

Tree vigorous, hardy and productive; fruit medium size, round, oval; skin a violet red, paler in shade, flesh deep yellow, juicy and pleasant. August.

SATSUMA (Blood Plum)

Quite popular, large, dark red from skin to pit, which is small, firm and juicy; tree productive. Early July.

MAYNARD

Dull red, large, round and firm; rich and sweet; sturdy, quick-growing, heavy-yielding variety; extra fine; ripens in July.

Each, \$1.00

PEACH

Very large; skin brownish red, slightly coarse grained, but juicy; freestone; very popular. July.

WASHINGTON

A large plum; skin dull yellow, with a pale crimson blush; flesh firm; very sweet and luscious; freestone. Early August.

YELLOW EGG

Very large; skin of a deep golden color, but rather acid; excellent for cooking; very showy. August.

GREEN GAGE

Small round; flesh pale green, melting and juicy; freestone. Mid-July.

FORMOSA

Japanese plum; unequaled; large, heart shaped and cherry red. Flesh firm, sweet and rich; pale yellow; fancy trade. Tree vigorous. July.

BURBANK

Medium; globular; cherry red, with lilac bloom; flesh yellow; bears very young. Late June.

REINE CLAUDE

Fine for canning, greenish yellow spotted with red, of finest quality. Late September.

WICKSON

Heart shaped; deep red with white bloom. Flesh amber color and good quality, very juicy; large, and a good shipper and keeper. Early August.

PEACHES

	Each	Per 10
First Grade, 4 to 6 feet.....	\$.20	\$1.50
First Grade, 3 to 4 feet.....	.15	1.25

Write for special price if larger quantities are wanted.

EARLY ALEXANDER

One of the largest and best of the extra early varieties. Almost freestone. July.

EARLY CHARLOTTE

Hardy, medium early, excellent flavor; originated in Oregon. Freestone.

HALE'S EARLY

Early, free; extra quality; hardy; prolific.

EARLY CRAWFORD

Very large, yellow, with red cheek; flesh sweet and excellent; our most popular peach for table and canning; freestone. August.

ELBERTA

Very large, bright yellow, red cheek; flesh yellow; juicy, sweet; regular bearer; fruit very showy and perfect; freestone. Late July.

FOSTER

Large yellow, dark red on the sunny side; very rich, juicy and early; freestone. Late July.

LATE CRAWFORD

Very large, roundish; yellow, with dark red cheeks; flesh deep yellow; juicy and melting; flavor rich and excellent; freestone; valuable for canning and drying. September.

MUIR

Large, pale yellow; very firm and sweet; best for drying; freestone. August.

MAYFLOWER

Beautiful red all over; extremely early; tree hardy and healthy. Should be in every home and commercial orchard. Last of June. Freestone.

CHAMPION

Large, cream white, slightly blushed. Tree hardy; should be in every orchard. July. Freestone.

HEATH'S CLING

One of the best of the clings. Very large; creamy white, with slight red; flesh white. September.

LOVELL

Leads all other freestones, especially in California; medium to large; shaded red; flesh firm and rich. Fine for canning, drying and shipping. Tree vigorous and good bearer. August.

TUSCAN CLING

Very large; yellow, blushed red. Vigorous and strong grower. July and August.

CROSBY

Medium; rich orange with slight red blush; freestone, pit small, flesh yellow, sweet and juicy. Good shipper; rank grower. Ripens before Crawford's Late.

KRUMMELL OCTOBER

A magnificent peach; very profitable. Ripens two weeks after Salway, but far better; a good keeper. Free from bitterness, very firm and fine texture. Tree vigorous, hardy. Good for State of Washington. Freestone.

SALWAY

Creamy yellow, red cheek; flesh deep yellow, red at the pit; rich and sweet; a standard late peach, growing more and more in favor with orchardists; freestone. Late September.

NECTARINES

	Each	Per 10
First Grade, 4 to 6 feet.....	\$0.25	\$2.00
First Grade, 3 to 4 feet.....	.20	2.00

Write for special price if large lot is wanted.

BOSTON

Large, deep yellow, bright blush; flesh yellow; very rich and luscious. Best for Oregon. August 1.

EARLY VIOLET

Medium; skin pale, shaded violet; flesh white; good. July.

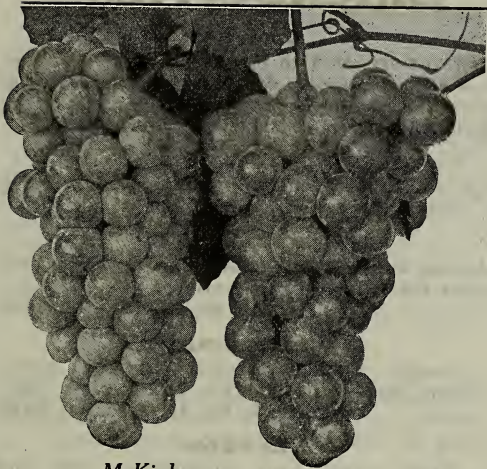
LIME AND SULPHUR SOLUTION—THE SCALE KILLER

"Butzer's Best"—A perfect lime and sulphur solution is the best known remedy for San Jose scale, anthracnose and other fruit pests. While lime and sulphur has been recommended by agricultural experiment stations, and has been used more or less for several years, it is only recently that a solution has been put on the market ready for use. The advantages of a commercial lime and sulphur spray over the home-made article are considerable.

It is a matter of fact that all who give instructions for use of the home-made article advise putting it on the trees while hot. This is undoubtedly to prevent the undissolved parts from settling, and thus clogging the pump

Butzer's Best Lime and Sulphur Solution is made under a very high temperature during the cooking, which, with proper proportions of lime and sulphur, insures a complete and perfect chemical combination. The water becomes completely charged with the lime and sulphur, and forms a perfect and highly concentrated solution of a brilliant red color, free from sediment, and all you have to do is to dilute it with water—one part solution to nine or eleven parts of water, according to the condition of the trees.

Price: 50-gal bbl., \$9.00; 5-gal. can, \$1.50; gal. can 50c; quart bottle, 25c.



McKinley

CONCORD

Large, black grape; bunches compact; berries round, sweet and pleasant. August.

DELAWARE

One of the finest of our native grapes; grows freely and is perfectly hardy; ripens early; berries small, light red. August.

EATON

Vigorous grower; very productive; bunches large, compact; fruit large, round, black, covered with a thick blue bloom. September.

McKINLEY (New)

A new early white grape of great merit; a strong, vigorous grower; thick, healthy foliage, and perfect self-fertilizing blossoms; bunches large and compact; fruit large, nearly round; very sweet, with no acid around the seeds, and no puckery taste in the skin; skin thin, green at first, then turning to yellow; bears handling and shipping well. August.

Prices, 2-year, each, 25c; 10, \$2.25

NIAGARA

Bunch medium; berry large, roundish, uniform; skin thin but tough; pale yellow; flesh tender and sweet; vine vigorous and productive; one of the best white grapes. September.

EUROPEAN VARIETIES

THOMPSON'S SEEDLESS

Very large; greenish yellow; firm, oval and seedless; fine for shipping and raisins; vigorous. September.

BLACK CORNICHON

Berry long, light blue, with a pleasant flavor; very attractive, skin thick. October.

FLAMING TOKAY

Large, light red; flesh firm and sweet; fine table sort and a good shipper. September.

GRAPES

Prices except where noted:

2-year Plants.....Each, \$0.15;
per 10, \$1.00; per 100, \$8.00; per 1000, \$70.00

If wanted in large numbers, write for prices

CATAWBA

Coppery red; best in warm climate; vinous and rich. September.

ISABELLA

Black, large bunch and berry; good keeper and shipper; vigorous and productive. September.

CAMPBELL'S EARLY

Berries large, nearly round, black, with light purple bloom; flesh rather firm but tender; quality rich, sweet, slightly vinous; a strong and vigorous grower. August.

Price, 1 year, each, 25c; 10, \$2.25

Price, 2 years, each, 35c; 10, \$3.25

McPIKE (New)

Bunches are large and compact; grapes of uniform extra large size of a blue black, covered with bloom. Ripens evenly and is of perfect quality; hardy everywhere. September.

Price, 2-year, 25c; 10, \$2.25

MOORE'S DIAMOND

Bunches large; berry greenish white, flesh juicy and almost without pulp.

MOORE'S EARLY

Bunch medium; berry large, resembling Concord, but more pulp and is earlier.

POCKLINGTON

Vine very vigorous, hardy and productive; bunch and berry of good size; color a light lemon yellow; flesh moderately tender, sweet. September.

Price, 2-year, each, 25c; per 10, \$2.25

WORDEN

Bunch very large and compact; berry large, black; an improved Concord. Late August.

GREEN MOUNTAIN

Greenish white, sweet and fine small bunch. August.

BRIGHTON

A large, delicious, sweet red grape; slightly aromatic, very little pulp. September.

MALAGA

Very large, yellowish green, fleshy. Fine shipper. September.

BLACK HAMBURG

Large, round, coal black; flesh sweet and juicy. Late September.

SULTANA

Raisin variety; small, amber colored, seedless. September 1.

MUSCAT

Raisin variety; especially adapted to California. September.

Blackberries

BLOWERS

A new variety, said to be the best; very productive and a good shipper; exceedingly sweet. Ripens just after the Erie. July. Price, each, 15c; 10, \$1.25; 100, \$10.00; postpaid, each, 20c; per 10, \$1.75.

ERIE

Large, coal black, round; standard variety. Vigorous. July. Each, 8c; 10, 60c; 100, \$5.00.

SNYDER

Medium size and fair quality; quite productive; best for the East. Ripens early.

Each, 8c; 10, 60c; 100, \$5.00

KITTATINNY

Large, roundish, conical, glossy black, juicy, sweet, excellent when fully ripe. July.

Each, 8c; 10, 60c; 100, \$5.00

LAWTON

Fruit large; very productive; well and favorably known; Oregon's most popular kind.

Each, 8c; 10, 60c; 100, \$5.00

ELDORADO

A valuable new variety; fruit large, jet black, melting, sweet and rich; hardy and very productive; fine for Oregon.

Each, 10c; 10, 90c; 100, \$8.00

Postpaid, each, 15c; 10, \$1.25

EVERGREEN

An Oregon introduction; beautiful lacinated foliage, which it retains all winter; berries long, black, sweet, rich and delicious; ripens from July to November.

10 for \$1.25; 100 for \$10.00

Postpaid, each, 20c; 10, \$1.50

HIMALAYA GIANT

An exceedingly strong, rampant grower of a trailing nature; everbearing; an enormous yielder. The berries are large, juicy, coreless, sweet and firm, with a delicious aromatic flavor. Its deep rooting qualities enable it to produce a large, firm berry even in a very dry season. Postpaid, each, 20c; doz., \$2.00

Freight or Express, each, 15c; doz., \$1.50

BURBANK'S PHENOMENAL

"Larger than the largest berry ever known." Bright crimson raspberry color, productive as could be desired, and most delicious of all berries for pies, canning jellies or jams. Sweeter than the Loganberry. Easily grown, stands shipping well, and hardy everywhere.

Compared with the Logan the color and general form are much the same the first season, particularly if the growing conditions have not been favorable, but when once established they have no equal in size, quality or productiveness. July 1.

Price, Each, 25c per 10, \$2.00; per 100, \$12.50

LOGANBERRY

The fruit is generally larger than the blackberry, often an inch and a quarter long; color dark red and produced in immense clusters. It partakes of the flavor of both the blackberry and raspberry, a mild, pleasant, vinous flavor, delicious and peculiar to this berry alone. Fruit ripens early, the bulk being gone before the blackberries or raspberries become plentiful. It is excellent for the table, eaten raw or stewed, and is excellent for jelly or jam. June.

Price, each, 15c; per 10, \$1.25; per 100, \$8.00

DEWBERRY

Price Each, \$0.15; per 10, \$1.25; per 100, \$10.00

GARDENIA

Large glossy black; delicious; heavy bearing; trailing vine. June.

LUCRETIA

Very popular, trailing vine. Fruit large, soft, sweet and with no hard core. Hardy, good for this Coast. Last of May.

WRITE FOR SPECIAL PRICES ON LARGE QUANTITIES



"NEW MAMMOTH"

Largest
and
Most
Delicious
Blackberry

NEW MAMMOTH

This wonderful new blackberry is a rampant grower, of trailing habit; the foliage is large, thick, of a deep green color. It is enormously productive and exceedingly early, ripening three weeks before other cultivated kinds. Fruit is enormous, specimens measuring 2½ inches long; seeds small, soft and abundant; cores small and soft. In size and flavor it surpasses all other varieties of blackberries. July 1.

Two-year-old, each, 25c; 10, postpaid, \$2.00

Ten, by express or freight, \$1.75; 100, \$15.00

One-year-old (tips), ea., 15c; 10, postpaid \$1.25

By express or freight, 10, \$1.00; \$100, \$8.00

Raspberries

RED CAPS

Prices, except where noted.....Per 10, \$0.75; per 100, \$4.00.

THE IMPROVED SUPERLATIVE

A New Berry of Great Merit

The color is a soft red crimson. The berry large and firm, with very small, brittle seeds. The healthy, vigorous growth, remarkable productiveness, hardiness, immense size, handsome, uniform shape and rich, luscious flavor make the "Superlative," from the shippers' standpoint, a most desirable berry. It is firm, disease resisting, and earlier than Cuthbert.

Each, 20c; 10, \$1.65, postpaid

HERBERT

Three in one; splendid, large, bright red; strong grower and very productive; originated in Canada; should be tried by every planter.

Price, strong plants, each, 25c; 10, \$2.00

CUTHBERT

Deep rich red, large and firm; one of the best market berries. Very strong, hardy and productive; ripens medium to late.

MARLBORO

Standard, light crimson, large, very firm; should be planted with Cuthbert as commercial variety; ripens early.

RED ANTWERP

Earlier and about the size of the Cuthbert; rich flavor; bright red, and a good market or home berry for this climate.

GOLDEN QUEEN

Yellow, large, fine quality; hardy and productive; should be in every home garden.

Black Caps

Prices except where noted:

Choice well rooted plants.....Each, 10c; per 10, 90c; per 100, \$6.00; per 1000, \$40.00

CONRATH

The Best Early Blackcap

A black raspberry of superior quality, being ten days earlier than Gregg, coming in with the earliest reds. One-sixth of an acre of Conraths produced 38 24-pound crates, netting the grower \$76. We especially recommend the Conrath as the best "blackcap" for Oregon. Try it.

Choice, well-rooted plants, each, 15c; 10, \$1.25, postpaid

Freight or express, 10, \$1.00; 100, \$8.00

COLUMBIAN

Purple-black, large and quite firm. Fine market and canning fruit. Bush hardy and productive.

MAMMOTH

Black, good quality. Not yet thoroughly tested.

CUMBERLAND

Black; very large; similar to Gregg if not better.

KANSAS

Black. Similar to Gregg, ripening earlier. Good commercially; strong grower and productive. Drought resistant.

MUNGER

Black, very good, juicy and fine for home use.

GREGG

Of good size, fine quality; very productive and hardy. It takes the same position among black caps as Cuthbert among the red sorts.

PLUM FARMER

New; very promising as a table and market berry; large black, hardy and productive. Good quality. Strong plants, postpaid, each, 15c; 10, \$1.25. Express or freight, 10, \$1.00; 100, \$8.00.

Gooseberries

Prices except where noted.....Each, \$0.10; Per 10, \$0.80; Per 100, \$5.00

OREGON CHAMPION

Berries very large, pale green color very sweet and fine for table use and pies; bush strong, not very thorny; very prolific bearer; most popular sort we have.

HOUGHTON

Vigorous grower, abundant bearer; fruit of medium size, pale red, sweet and juicy.

RED JACKET (JOSSELYN)

Of large size; smooth, prolific and hardy; of best quality; a wonderful cropper, with bright, clean, healthy foliage.

Each, 15c; 10, \$1.25; 100, \$12.00

DOWNING

Large, light green; soft, juicy and good. Vigorous and very productive.

INDUSTRY

Very large, dark red, of delicious flavor; the best of all red varieties. Bushes strong, upright and very productive.

Each, 20c; 10, \$1.75; 100, \$15.00

PEARL

Large, light yellowish green; very hardy and free from mildew; superior in size and quality. Very prolific.

Write for special price. State about how many you will want. Can make you a very low price on some varieties, as we have a surplus.

WRITE FOR SPECIAL PRICES ON LARGE QUANTITIES

Currents

Currents are a profitable, easily grown crop, and the market is always good.

Perfection
Currents



Prices except where noted.....Each, \$0.10; Per 10, \$0.75; Per 100, \$6.00; Per 1000, \$50.00

NEW VARIETIES.

PERFECTION

New; largest and most prolific Currant; bright red, rich flavor, mild sub-acid; no currant can approach in yield or quality this wonderful new currant.

Strong plants, each 15c; 10, \$1.40; 100, \$12.50

POMONA

A splendid new red variety; good keeper; has the record for acreage yield. About the size of Perfection and comes a little later.

Strong plants, each, 25c; 10, \$2.25; 100, \$15.00

BELLE DE BOSKOOP

A splendid new black currant excelling in quality and productiveness. A hardy, vigorous grower; the largest and best black currant. Strong plants, each 75c.

WHITE CURRANTS

WHITE TRANSPARENT

The best white currant known. To be classed with the Perfection red. Splendid for market and table use; berries large, having a rich flavor; mild sub-acid. Vigorous and very productive.

WHITE GRAPE

Large, yellowish white, valuable for the table.

BLACK NAPLES

Very large, black, rich, tender and fine for jellies and wine. Productive and vigorous.

STANDARD VARIETIES

CHERRY

Very large; deep red; fine for preserving; valuable market variety.

FAY'S PROLIFIC

Bright red, very sweet, stems longer than Cherry and fruit hangs on better than most varieties. To be planted with Cherry.

NORTH STAR

Strongest grower among red varieties; bunches average four inches in length; extra quality; very productive.

VICTORIA

Large, bright red bunches, very long; an erect grower; late, productive and very valuable.

Strawberry Plants

CARE FOR AND FEED YOUR PLANTS

Neglect is the prime factor in strawberry failures, and most strawberry beds suffer from lack of attention and starvation. Proper fertilization and intelligent culture insure enormous crops of finest fruit and freedom from diseases and pests. White grubs, cutworms, crown miners, etc., can all be controlled by preventive measures. Never set strawberries on or near clover sod or hay fields.

Better Strawberries or larger crops are not produced anywhere than right here in the Northwest.

NEW OREGON

Almost an everbearer, a fine cropper and for general purpose or fancy market cannot be equalled. Fruit very large, firm and even in form. Flavor rich, sweet and delicious. Unexcelled for table or for canning. Hardy.

Price, per 100, 50c; 1000, \$3.50

CLARK'S SEEDLING

Hood River berry; fine shipper; fruit large, firm and delicious; a prolific bearer and especially adapted to dry soil.

Price, per 100, 50c; per 1000, \$3.50

The strawberries here offered have all stood the market test and will be safe in selecting any one of them that will suit your conditions and requirements. They are the best varieties obtainable. Write for special price on large lots.

WRITE FOR SPECIAL PRICE ON LARGE QUANTITIES

MAGOON

A standard variety adapted to Western Oregon and Washington; fruit large, fine and excellent, flavor sub-acid; bears heavily throughout season.

Price, per 100, 50c; per 1000, \$3.00

WILSON

An old standard, a heavy bearer of medium sized berries, sharp acid flavor and splendid for canning and preserving.

Price, per 100, 50c; per 1000, \$3.00

MARSHALL

Very large, dark crimson, fine flavor, good quality; a fine market and table fruit.

Price, per 100, 60c; 1000, \$3.50

EXCELSIOR

Very early, of good size, bright red, cone-shaped. Ripens evenly.

Price, per 100, 60c; 1000, \$4.50

GOLD DOLLAR

Very early; large, dark red to the center. Foliage heavy, large and spreading, which protects the blooms from frosts; strong stem; a heavy cropper. A price getter and steadily coming into prominence.

Price, per 100, 50c; per 1000, \$3.50

NUT TREES

ALMOND (NUT BEARING)

Almonds can be grown successfully in many sections of Oregon and Washington, and are attracting much attention from commercial orchardists. We can supply most of the leading varieties at price listed. Special prices on large orders.

Choice trees, 3 to 5 feet, each, 50c

I. X. L.

A vigorous grower and sure cropper, producing nuts of large size and handsome appearance; shell thin; most popular commercial sort.

HARD SHELL

A fine hardy variety with large plump kernel of good quality.

DRAKE'S SEEDLING

Regular and abundant bearer; soft shell, tree vigorous and productive.

LANGUEDOC

Large and sweet. The best of the imported varieties.

NONPAREIL

Tree beautiful, slightly weeping; nut sweet and shell very thin. Best for the home.

JORDAN

New, Spanish origin; hard shell, kernel filling the entire cavity. A strong and thrifty grower and a heavy bearer. A commercial variety much in demand.

NE PLUS ULTRA

Large and very long; soft shell; hulls free. Tree heavy and regular bearer.

TEXAS PROLIFIC

Closely resembles Drake's Seedling. Kernel very plump and of medium size. Shell soft and hulls easily. A good cropper.

HICKORY

SHELLBARK

Popular Eastern variety, tree hardy but slow grower. Nuts medium size, very good. Quality excellent.

Price, 3 to 4 feet, each, 75c

CHESTNUT

AMERICAN SWEET

Makes a handsome shade tree; full medium size, sweet and well flavored.

7 to 8 feet, each, 75c to \$1.00

SPANISH

A valuable species, both for ornamental use and fruit. It forms a handsome lawn tree and produces much larger fruit than the American variety.

4 to 6 feet, each, 75c; 7 to 8 feet, \$1.00

MAMMOTH JAPANESE

A variety we import from Japan; yields much the best and largest fruit.

Each, 75c to \$1.00

PARAGON

Nuts large and handsome, sweet and of good quality. Tree hardy and very productive.

4 to 6 feet, each, 75c to \$1.00

RIDGLEY

The hardest of the large chestnut and of exceptionally good quality.

4 to 6 feet, each, 75c to \$1.00

BUTTERNUT

A beautifully formed tree bearing a rough coated nut of most attractive flavor, well known to the Middle West. Succeeds fairly well in the Pacific States.

Price, each, 50c to 75c

WALNUTS

ENGLISH OR FRENCH

The cultivation of English Walnuts on the Pacific Coast is very profitable, and many people are now setting out large groves. If you do not care to set out a field of trees, a row set along the driveway, lane, around the fences, or on a sidehill too steep to cultivate will prove a most profitable investment, and will require very little attention. They are rapid growers, and will make fair-sized trees in a few years. For those who prefer "second generation," we have a fine lot of one and two-year-old trees (the best age to plant). These are nut-bearing, second-generation stock, and of the best varieties on the Coast, Franquette, Mayette, Praeparturien, etc.

CALIFORNIA BLACK

A rapid grower and very desirable; nut medium size, with hard, smooth shell. Adapts itself easily to different climates.

FRANQUETTE

Grafted on California Black

Quite large, elongated oval, and very attractive, kernel full, sweet and of a rich nutty flavor.

FRANQUETTE AND MAYETTE

Second generation, soft shell, selected stock; very good, sweet and good tasting. Trees hardy and prolific bearers. Nuts are rich and meaty, finest commercial sorts.

PRICES

One-year-old, well-rooted, each, 25c; 10, \$2.00

Two-year-old, well rooted, tops 2 feet up, 40c

Seedling stock grown from select nuts,

4 to 6 feet each, 75c; 6 to 8 feet, 75c to \$1.00

GRAFTED STOCK, 4 to 6 feet, \$1.50 to \$2.00

Special prices on large lots.

FILBERTS

BARCELONA

Magnificent large nut from Spain, first quality; can be grown as low standard tree or bush.

Each, 35c to 50c

DuCHILLY

The largest Filbert on Pacific Coast. Nuts are broad, 1 inch by $\frac{3}{4}$ of an inch; full fleshed and sweet; best grown as low standard.

Each, 35c to 50c

Special prices on large orders.

FILBERT

Kentish Cob

An English variety, of fair quality and liked by many planters. Nuts large and good tasting.

Each, 35c to 50c

Foreign Names of Vegetables and Herbs.

ENGLISH	GERMAN.	FRENCH.	SPANISH	ITALIAN.
Anise	Anis, Gruner Anis	Anis	Anis, Matalahuga	Aniso, Anacio
Artichoke	Artischoke	Artichaut	Alcachofa	Articiocca
Asparagus	Spargel	Asperge	Esparrago	Sparagio
Balm	Citronen-Melisse	Melisse citronelle	Toronjil, Citronella	Melissa
Basil	Basilikum	Basilic grand	Albaca	Basilice
Beans	Bohnen	Haricots	Habichuela	Fagioli
Beet	Rube	Betterave	Remolacha	Barbabetola
Borage	Boretsch	Bourrache	Boraja	Boragine
Brocoli	Spargelkohl	Chou Brocoli	Brocoli	Brocoli
Brussels Sprouts	Blumenkohl	Chou de Bruxelles	Bretones de Bruselas	Cavolo di Brusselles
Cabbage	Kopfkohl, Kraut	Chou pomme	Col repello	cavolo cappuccio
Cabbage, Savoy	Wirsing	Chou de Milan	Col de Milan	Cavolo di Milano
Caraway	Feld-Kummel	Cumin des pres	Comino	Carvi
Carrot	Carotten, Mohren	Carotte	Zanahoria	Carota
Cauliflower	Blumenkohl	Chou-fleur	Coliflor	Cavolfiore
Celery	Sellerie	Celeri	Apio	Sedano
Celeriac	Knoll-Sellerie	Celeri-rave	Apio-nabo	Sedano-rapa
Chervil	Kerbel	Cerfeuil	Perifollo	Cerfoglio
Chicory	Cichorienwurzeln	Chicoree sauvage	Achicoria	Cicoria selvatica
Coriander	Coriander	Coriandre	Culantro	Coriandorlo
Corn Salad	Feldsalat	Mache	Canonigos	Valeriana
Corn	Mais	Mais	Maiz	Mais
Cress	Garten-Kresse	Cresson alenois	Mastuerzo	Agetto
Cress, Water	Brunnenkresse	Cresson de fontaine	Berro	Nasturtio aquatico
Cucumber	Gurken	Concombre	Cohombro	Cetriolo
Dandelion	Lowenzahn	Pissenlit	Diente de leon	Dente di leone
Dill	Dill	Aneth	Eneldo	Aneto
Egg Plant	Eierpflanze	Aubergine	Berengena	Petronciano
Endive	Endivien	Chicoree Endive	Endivia	Indivia
Fennel	Fenchel	Fenouil	Hinojo	Finocchio
Garlic	Knoblauch	Ail	Ajo	Aglio
Horse Radish	Meer Rettig	Raifort sauvage	Taramago	Rafano
Hyssop	Isop	Hyssoppe	Hisopo	Issopo
Kale	Blatterkohl	Chou vert	Breton, Berza	Cavolo verde
Kohl Rabi	Knollkohl	Chou-rave	Col rabano	Cavolo rapa
Lavender	Lavendel	Lavende	Espliego	Lavanda
Leek	Poree, Lauch	Poireau	Puerro	Porro
Lettuce	Lattich, Kopfsalat	Laitue	Lechuga	Lattuga
Marjoram	Majoran	Marjolaine	Mejorana	Maggiorana
Melon	Melone	Melon	Melon	Popone
Melon, Water	Wasser-Melone	Melon d'eau	Sandia	Melone d'acqua
Mushroom	Schwamm	Cahmpignon	Seta	Fungo pratajolo
Nasturtium	Kapuciner Kresse	Capucine	Capuchina	Nasturtio
Okra	Ocher	Gombaud	Gombo	Ocra
Onion	Zwiebel	Ognon	Cebolla	Cipollo
Parsley	Petersilie	Persil	Perejil	Prezzemolo
Parsnip	Pastinake	Panais	Chirivia	Pastinaca
Peas	Erbsen	Pois	Guisante	Pisello
Pepper	Pfeffer	Piment	Pimiento	Peperone
Pumpkin	Melonen-Kurbiss	Potiron	Calabaza totanera	Zucca
Radish	Radies	Radis	Rabanito	Ravanello
Rhubarb	Rhabarber	Rhubarbe	Ruibarbo	Rabarbaro
Rosemary	Rosmarin	Romarin	Romero	Rosmarino
Rue	Raute	Rue	Ruda .....	.....
Saffron	Safran	Safran	Azafran	Zafferano
Sage	Salbei	Sauge	Salvia	Salvia
Salsify	Haferwurzeln	Salsifis	Salsif blanco	Sassefrica
Sorrel	Sauerampfer	Oseille	Acedera	Acetosa
Summer Savory	Bohnenkraut	Sarriette annuelle	Ajedrea comun	Santoregia
Spinach	Spinat	Espinard	Espinaca	Spinace
Squash	Kurbiss	Courge	Calabaza	Zucca
Tansy	Gemeiner Rainfarn	Tanaisie	Tanacetos	Atanasia
Thyme	Thymian	Thym	Tomillo	Timo
Tomato	Liebesapfel	Pomme d'Amour	Tomate	Pomo d'oro
Turnip	Weisse-Rube	Navet	Nabo	Navone
Wormwood	Wermuth	Absinthe	Ajenjo	Assenzio

OUR MAIL ORDERS, EXPORT BUSINESS IS INCREASING EVERY YEAR. WE GIVE SPECIAL ATTENTION AND CARE TO SHIPPING GOODS TO FOREIGN COUNTRIES.

Useful Tables

USUAL DISTANCES FOR PLANTING VEGETABLES—(Bailey).

Asparagus, rows 3 to 4 feet apart, 1 to 2 feet apart in rows.
Beans, bush, 2 to 3 feet apart, 1 foot apart in rows.
Beans, pole, 3 to 4 feet each way.
Beets, early, in drills 12 to 18 inches apart.
Beets, late, in drills 2 to 3 feet apart.
Cabbage, early, 16x28 inches to 18x30 inches.
Cabbage, late, 2x3 feet to 2½x3½ feet.
Carrots, in drills 1 to 2 feet apart.
Cauliflower, 2x2 feet to 2x3 feet apart.
Celery, rows 3 to 4 feet apart, 6 to 9 inches in row.
Corn, sweet, rows 3 to 3½ feet apart, 9 inches to 2 feet in rows.
Cucumber, 4 to 5 feet each way.
Egg-plant, 3x3 feet.
Lettuce, 1x1½ feet or 2 feet.
Melon, Musk, 5 to 6 feet each way.
Melon, Water, 7 to 8 feet each way.
Onions, in drills from 14 to 20 inches apart.
Parsnips, in drills 18 inches to 3 feet apart.
Peas, in drills early kinds, usually in double rows from 6 to 9 inches apart, late, in single rows 2 to 3 feet apart.
Pepper, 15 to 18 inches x 2 to 2½ feet.
Potatoes, 10 to 18 inches x 2½ to 3 feet.
Pumpkins, 8 to 10 feet each way.
Radish, in drills 10 to 18 inches apart.
Rhubarb, 2 to 4 feet x 4 feet.
Salsify, in drills 1½ to 2 feet apart.
Spinach, in drills 12 to 18 inches apart.
Squash, 3 to 4 feet x 4 feet.
Sweet Potatoes, 2 feet x 3 to 4 feet.
Tomato, 4 feet x 4 to 5 feet.
Turnip, in drills 1½ to 2½ feet apart.

DISTANCES FOR PLANTING TREES:

(In planting trees the greater distance should be given on the richer soils.)

Apples	20 to 30 feet each way
Pears (Standard)	20 to 25 feet each way
Pears (Dwarf)	12 to 15 feet each way
Quinces	15 to feet each way
Peaches	18 to 24 feet each way
Plums	15 to 20 feet each way
Cherries	15 to 20 feet each way
Blackberries	6x4

Raspberries	6x3
Currants	5x3
Gooseberries	5x3
Strawberries (Hills)	36 by 18 inches
Strawberries (Matted rows)	48 by 12 inches
Grapes	8x8 to 10x12 feet

QUANTITY OF SEED TO PRODUCE A GIVEN NUMBER OF PLANTS AND SOW AN ACRE.

	Quantity per acre
Artichoke, 1 oz. to 500 plants	.6 oz.
Asparagus, 1 oz. to 800 plants	1 lb.
Asparagus Roots	1000 to 7250
Barley	2½ bu.
Beans, dwarf, 1 pint to 100 ft. of drill	1 bu.
Beans, pole, 1 pint to 100 hills	½ bu.
Beet, garden, 1 oz. to 100 ft. of drill	.7 lbs.
Beet, Mangel, 1 oz. to 100 ft. of drill	.5 lbs.
Broccoli, 1 oz. to 5000 plants	.2 oz.
Brussels Sprouts, 1 oz. to 5000 plants	.2 oz.
Buckwheat	½ bu.
Cabbage, 1 oz. to 5000 plants	.2 oz.
Carrot, ¼ oz. to 100 ft. of drill	2½ lbs.
Cauliflower, 1 oz. to 5000 plants	2½ oz.
Celery, 1 oz. to 15000 plants	.2 oz.
Chicory	.4 lbs.
Clover, Alsike and White Dutch	.6 lbs.
Clover, Lucerne	15 to 25 lbs.
Clover, Crimson Trefoil	10 to 15 lbs.
Clover, Large Red and Medium	8 to 12 lbs.
Collards, 1 oz. to 5000 plants	.2 oz.
Corn, rice (shelled)	.2 qts.
Corn, sweet, ¼ pint to 100 hills	.6 qts.
Cress, ¾ oz. to 100 ft. of drill	12 lbs.
Cucumber, 1 oz. to 100 hills	1 to 3 lbs.
Egg Plant, 1 oz. to 2000 plants	.4 oz.
Endive, ¼ oz. to 100 ft. of drill	4½ lbs.
Flax, broadcast	½ bu.
Garlic, bulbs, 1 lb. to 10 ft. of drill.	
Gourd, 2 oz. to 100 hills.	
Grass, Blue, Kentucky	.2 bu.
Grass, Blue, English	1 bu.
Grass, Hungarian and Millet	½ bu.
Grass, Mixed Lawn	3 to 5 bu.
Grass, Red Top, Fancy Clean	8 to 10 lbs.
Grass, Red Top, in Chaff	20 to 28 lbs.
Grass, Timothy	¼ bu.
Grass, Orchard, Perennial Rye, Fowl Meadow and Wood Meadow	.2 bu.

USEFUL TABLES--Continued

Quantity of Seed to Produce a Given Number of Plants and Sow an Acre.

	Quantity per acre		Quantity per acre
Hemp	½ bu.	Peas, garden, 1 pt. to 100 feet of drill	1 to 3 bu.
Horse Radish Roots	10,000 to 15,000	Peas, field	2 bu.
Kale, 1 oz. to 5000 plants	2	Pepper, 1 oz. to 1,500 plants	3 ozs.
Kojhl Rabi, 1-3 oz. to 100 ft. of drill	4 lbs.	Pumpkin, 1-3 qt. to 100 hills	3 to 4 lbs.
Leek, 1-3 oz. to 100 feet of drill	4 lbs.	Radish, 2-3 oz. to 100 feet of drill	10 to 12 lbs.
Lettuce, ¼ oz. to 100 feet of drill	3 lbs.	Rye	1½ bu.
Martynia, 1 oz. to 100 feet of drill	5 lbs.	Salsify, ¾ oz. to 100 feet of drill	8 lbs.
Melon, Musk, 1 oz. to 100 hills	1 to 3	Spinach, ½ oz. to 100 feet of drill	8 lbs.
Melons, Water, 4 oz. to 100 hills	1½ to 4 lbs.	Summer Savory	¾ lbs.
Nasturtium, 2 oz. to 100 feet of drill	15 lbs.	Sunflower	8 lbs.
Okra, 1 oz. to 100 feet of drill	8 lbs.	Squash, Summer, 4 oz. to 100 hills	2 lbs.
Onion Seed, 1-3 oz. to 100 feet of drill	4 to 5 lbs.	Squash, Winter, 8 oz. to 100 hills	2 lbs.
Onion Seed, for Sets	40 to 80 lbs.	Tomato, 1 oz. to 4,500 plants	1 oz.
Onion Sets, 1 qt. to 40 feet of drill	8 bu.	Tobacco, 1 oz. to 5000 plants	2 ozs.
Parsnip, ¼ oz. to 100 feet of drill	3 lbs.	Turnip, 1 oz. to 250 feet of drill	1 to 3 lbs.
Parsley, ¼ oz. to 100 feet of drill	3 lbs.	Vetches	1 bu.

Weights and Measures Used in the United States

TROY WEIGHT.

24 grains	1 pwt.
20 pwt	1 ounce
12 ounces	1 pound
Used for weighing gold, silver and jewels.	

APOTHECARIES' WEIGHT.

20 grains	1 scruple
3 scruples	1 dram
8 drams	1 ounce
12 ounces	1 pound

The ounce and pound in this
are the same as in Troy Weight.

AVOIRDUPOIS WEIGHT.

2711-32 grains	1 dram
16 drams	1 ounce
16 ounces	1 pound
25 pounds	1 quarter
4 quarters	1 cwt.
2000 pounds	1 short ton
2240 pounds	1 long ton

DRY MEASURE

2 pints	1 quart
8 quarts	1 peck
4 pecks	1 bushel
36 bushels	1 chaldron

LIQUID MEASURE.

4 gills	1 pint
2 pints	1 quart
4 quarts	1 gallon
31½ gallons	1 barrel
2 barrels	1 hogshead

SQUARE MEASURE.

144 square inches	1 sq. foot
9 square feet	1 sq. yard
30¼ square yards	1 sq. rod
40 square rods	1 rood
4 roods	1 acre
640 acres	1 sq. mile

TIME MEASURE.

60 seconds	1 minute
60 minutes	1 hour
24 hours	1 day
7 days	1 week
28, 29, 30, or 31 days	1 calendar month
(30 days 1 month in computing interest)	
365 days	1 year
366 days	1 leap year

CIRCULAR MEASURE.

60 seconds	1 minute
60 minutes	1 degree
30 degrees	1 sign
90 degrees	1 quadrant
4 quadrants, 12 signs or 360 degrees	1 circle

LONG MEASURE.

12 inches	1 foot
3 feet	1 yard
5½ yards	1 rod
40 rods	1 furlong
8 furlongs	1 statute mile
3 miles	1 league

CLOTH MEASURE.

2¼ inches	1 nail
4 nails	1 quarter
4 quarters	1 yard

PAPER MEASURE.

24 sheets	1 quire
20 quires	1 ream (480 sheets)
2 reams	1 bundle
5 bundles	1 bale

SURVEYOR'S MEASURE.

7.92 inches	1 link
25 links	1 rod
4 rods	1 chain
10 sq. chains or 160 sq. rods	1 acre
640 acres	1 sq. mile
36 sq. miles (6 miles sq.)	1 township

CUBIC MEASURE.

1,728 cubic in	1 cubic foot
27 cubic ft.	1 cubic yard
128 cubic ft.	1 cord (wood)
40 cubic ft.	1 ton (shipping)
2,150.42 cubic in.	1 standard bu.
231 cubic in.	1 standard gal.
1 cubic ft.	about 4-5 of a bu.

MARINER'S MEASURE.

6 feet	1 fathom
120 fathoms	1 cable length
7½ cable lengths	1 mile
5,280 feet	1 statute mile
6,085 feet	1 nautical mile

MISCELLANEOUS.

3 inches	1 palm
4 inches	1 hand
6 inches	1 span
18 inches	1 cubit
21.8 inches	1 Bible cubit
2.5 feet	1 military pace

USEFUL TABLES--Continued

Table Giving the Amounts of Fertilizer Ingredients (Potash, Phosphoric Acid and Nitrogen) Contained in the Crop from One Acre

CROP.	Yield.	Straw, etc.	Potash.	Phosphoric Acid.	Nitrogen.
Apples.....	15 tons	.....	60 lbs.	30 lbs.	39 lbs.
Barley.....	30 bu.	2,000 lbs.	51 "	17 "	57 "
Beans.....	30 "	2,700 "	53 "	30 "	75 "
Buckwheat.....	34 "	2,800 "	40 "	14 "	56 "
Cabbage.....	30 tons	.....	270 "	70 "	200 "
*Clover, green.....	15 tons	.....	140 "	40 "	130 "
Clover, dry.....	2 "	.....	88 "	14 "	82 "
Corn.....	70 bu.	6,000 lbs.	55 "	48 "	83 "
Grapes.....	2 tons	7,000 "	39 "	11 "	32 "
Hops.....	600 lbs.	2,700 "	53 "	23 "	84 "
Mixed Hay.....	.....	5,000 "	77 "	18 "	70 "
Oats.....	60 bu.	3,200 "	62 "	22 "	55 "
Onions.....	45,000 lbs.	.....	72 "	37 "	72 "
Pears.....	16 tons	.....	26 "	10 "	32 "
Peas.....	30 bu.	3,000 lbs.	52 "	33 "	108 "
Plums.....	8 tons	.....	40 "	4 "	30 "
Potatoes.....	200 bu.	1,500 lbs.	74 "	21 "	46 "
Rye.....	30 bu.	4,250 "	45 "	26 "	51 "
Sugar Beets.....	15 tons	6,000 "	143 "	32 "	69 "
Timothy Hay.....	.....	4,000 "	94 "	23 "	89 "
Tobacco.....	1,600 lbs.	1,400 "	200 "	16 "	76 "
Tomatoes.....	10 tons	.....	54 "	20 "	32 "
Turnips.....	700 bu.	5 tons	180 "	52 "	80 "
Wheat.....	35 "	3,000 lbs.	31 "	24 "	59 "

*Crimson Clover.

MATURITY TABLE

	No. of Days.		No. of Days.
Beans.....	40 to 90	Mangel Wurzels.....	140 to 150
Beets.....	50 to 100	Okra.....	90 to 100
Cabbages.....	80 to 120	Onions for green.....	60 to 70
Cauliflowers.....	100 to 120	Onions for storage.....	120 to 160
Carrots.....	60 to 100	Parsnips.....	120 to 140
Celery.....	120 to 140	Peas.....	50 to 100
Sweet Corn, table use.....	65 to 80	Peppers.....	120 to 140
Cucumbers.....	45 to 60	Pumpkins.....	100 to 120
Egg Plants.....	140 to 150	Salsify.....	120 to 160
Endives.....	50 to 70	Spinach.....	30 to 40
Kale.....	100 to 130	Squash, Summer.....	55 to 60
Kohl Rabi.....	80 to 90	Squash, Winter.....	100 to 125
Lettuce.....	40 to 65	Tomatoes.....	90 to 110
Melons.....	75 to 90	Turnips.....	45 to 90

FOR CLEANING VARIOUS SUBSTANCES

Black Silk.—Brush and wipe it thoroughly, lay on table with the side intended to show, up; sponge with hot coffee strained through muslin. When partly dry, iron.

To Remove Stains or Grease from Oil Paint.—Use bisulphide of carbon, spirits of turpentine, or if dry and old, use chloroform. These and tar spots can be softened with olive oil and lard.

Stains, Iron Rust, or Ink from Vellum or Parchment.—Moisten the spot with a solution of oxalic acid. Absorb same quickly by blotting paper or cloth.

Fruit Spots from Cottons.—Apply cold soap, then touch the spot with a hair pencil or feather dipped in chlorate of soda, then dip immediately in cold water.

Grease from Silks.—Take a lump of magnesia, rub it wet on the spot, let it dry, then brush the powder off.

Iron Rust may be removed from white goods by sour milk.

Scorch Stains from White Linen.—Lay in bright sun.

Oil Marks on Wall Paper.—Apply paste of cold

water and pipe clay, leave it on all night, brush it off in the morning.

Paint Spots from Clothing.—Saturate with equal parts turpentine and spirits of ammonia.

To Cleanse House Paper.—Rub with a flannel cloth dipped in oatmeal.

Black Cloth.—Mix one part of spirits of ammonia with three parts warm water, rub with sponge or dark cloth, clean with water, rub with the nap.

Furniture, for Finger Marks.—Rub with a soft rag and sweet oil.

Zinc.—Rub with a piece of cotton cloth dipped in kerosene, afterwards with a dry cloth.

Hands from Vegetable Stains.—Rub with a slice of raw potato.

Window Glass.—Paint can be removed by a strong solution of soda.

To Clean Tinware.—Common soda applied with a moistened newspaper and polished with a dry piece will make it look like new.

USEFUL TABLES--Continued

The formulae given below are designed to cover the more common needs of farmers and horticulturists. Fungicides and insecticides may often be combined in spraying, and where Bordeaux mixture is used for fungous diseases this practice is recommended. Use materials of known strength and quality, follow the directions given, apply thoroughly, and at the proper times, and good returns will be the result.

FUNGICIDES

Bordeaux Mixture.

Copper Sulphate (blue vitriol)..... 4 pounds
Quicklime (not air slaked)..... 4 pounds
Water to make..... 50 gallons

Dissolve the copper sulphate by putting it in a bag of cheese-cloth and hanging this in a vessel holding at least 4 gallons, so that it is just covered by water. Use an earthen or wooden vessel. Slake the lime by addition of a small quantity of water, and when slaked cover freely with water and stir. Strain the milk of lime thus made into the copper sulphate. Pour more water over the remaining lime, stir and strain into the other until all lime but stone lumps is taken up. The mixture should be made fresh before using and any left over for a time should be thrown out or have fresh lime added.

For rots, moulds, mildews and all fungous diseases.

Bordeaux Mixture.

(Weaker solution than No. 1.)

Copper Sulphate..... 2 pounds
Quicklime..... 2 pounds
Water to make..... 50 gallons

For use on such trees as have foliage injured by Bordeaux 1. (For peach trees and similar fruits.)

Bordeaux Mixture and Iron Sticker.

Copper Sulphate (blue vitriol)..... 2 pounds
Iron Sulphate (copperas)..... 4 pounds
Quicklime..... 6 pounds
Water to make..... 50 gallons

Used as a substitute for Bordeaux 1 upon most fruits in foliage and certain vegetables. The spray is rusty colored by reason of the iron compound.

Caution.—Do not leave solution of iron sulphate standing beyond a second day.

Soda Bordeaux Mixture.

(For very late spraying.)

Copper Sulphate..... 4 pounds
Commercial Caustic Soda..... 1½ pounds
Water to make..... 50 gallons

Dissolve and mix the copper sulphate and lye and dilute this solution with the water before using. This mixture is used instead of the ordinary Bordeaux, when a fungicide is needed within six weeks of the time the fruit is to be gathered, as it will not seriously spot it.

Copper Sulphate Solution.

Copper Sulphate..... 4 pounds
Water to make..... 50 gallons

For use before the buds open the above solution is fully as effectual as Bordeaux mixture, and is easier to prepare and apply. The weaker solution should be used upon the peach, although no injury would be done upon any kind of fruit tree, while in a dormant condition, if the stronger solution should be used, but it should not be applied to any plant after the buds have opened.

Potassium Sulphide Solution.

Potassium Sulphide (liver of sulphur) . 1 ounce
Water..... 3 to 4 gallons

This preparation loses its strength upon standing, so should be made immediately before using. Particularly valuable for surface mildew.

Formula for Whitewash.

Slake ½ bushel of fresh lime with hot water, keeping it covered during the process. Add ½ peck of salt previously dissolved in warm water, 2 pounds of ground rice boiled to a thin paste. Stir in boiling hot, ½ pound of Spanish Whiting, ½ pint glue well dissolved in warm water. Dilute the above with 8 gallons of hot water, stirring it well to become thoroughly mixed. Strain through a fine sieve or strainer, and allow it to stand a few days before using. Apply while hot with one of our sprayers. Coloring matter may be added for any shade desired.

USEFUL TABLES--Continued

INSECTICIDES

Lime-Sulphur Wash.

The best treatment for San Jose Scale.

Stone Lime.....	15 to 20 pounds
Flowers of Sulphur.....	15 pounds
Water.....	50 gallons

The above mixture can be prepared in different quantities by using a proportionate amount of each. This is prepared in the following manner: Place the full amount of lime in a kettle or vat and start it to slake in hot water using enough to prevent the lime from being air-slaked but not enough to drown it. During the slaking process add the sulphur, all lumps having first been pulverized; stir in thoroughly and add water gradually to reduce the mixture to a thin paste. If the mixture is not already boiling, bring it to this point and allow it to boil for one hour, stirring frequently to prevent burning to the side of the vessel. After one hour's boiling, add enough water to make 50 gallons of the mixture. When emptying into the spraying barrel, it should be passed through a fine wire screen to remove all sediment. If possible, apply to the trees while hot.

Kerosene Emulsion.

Laundry Soap (chipped).....	½ pound
Kerosene (coal oil).....	2 gallons
Boiling Water.....	1 gallon

Dissolve the soap in the water and when boiling hot remove from the fire and add the kerosene. Drive the mixture through a force pump back into the vessel for five or ten minutes. Use one part of emulsion to eight parts of water for scale insects. For soft bodied insects such as plant lice, lice on animals, etc., use one part emulsion to 15 to 20 parts of water. The stock emulsion will keep good for months if kept in air-tight vessels. This emulsion kills by contact and should be applied thoroughly and be kept well stirred. Only the diluted emulsion 1 to 20 should be used when trees are in leaf.

Arsenate of Lead.

Arsenate of Soda.....	4 ounces
Acetate of Lead.....	11 ounces
Water.....	3 to 5 gallons

Dissolve the ingredients separately each in one gallon of warm water. Mix and pour into spray tank containing from 50 to 100 gallons of water. Add the milk of lime from

two or three pounds of freshly slaked lime. This is most satisfactory mixture of any for the formulae. It is more adhesive than Paris Green and if properly made of good materials will burn foliage but little, no matter what strength is used. In some respects the commercial brands on the market are more satisfactory than the home-made product. For most purposes 3 pounds of the commercial product arsenate of lead, in 50 gallons of spray are used. Either water or Bordeaux mixture may be used as the carrier.

Paris Green.

Paris Green may be used with Bordeaux Mixture at the rate of one pound in from 100 to 150 gallons. It may be used alone in water in the same proportion with two or three pounds of freshly slaked lime added to prevent burning of the foliage. The mixture should be kept well stirred.

Pyrethrum.

Pyrethrum may be used as a spray at the rate of one ounce to two gallons of water. It is poisonous to insects but not to higher animals and can be used on ripening fruits.

White Hellebore.

Hellebore may be used for spraying fruit a few days before harvest when arsenical sprays would be dangerous.

White Hellebore.....	1 ounce
Water.....	3 gallons

Tobacco Water.

Boil tobacco stems or tobacco dust in one gallon of water for one hour. Strain and add water to make two gallons of spray for each pound of tobacco used. Good for plant lice or soft bodied insects.

Soluble Oils.

Certain commercial oils are now in the market which readily emulsify with cold water at different dilutions for winter and summer applications for San Jose Scale. Some of these are valuable and are recommended if used with care.

Oregon Wash.

Lime.....	15 pounds
Sulphur.....	15 pounds
Copper Sulphate (blue vitriol)....	1½ pounds
Water.....	50 gallons

To be mixed similar to Lime-Sulphur 7.

BUTZER'S HAPPY THOUGHT DAHLIA COLLECTIONS

BUTZER'S DAHLIA COLLECTIONS.

These bulbs will be labeled with their correct name and no two alike, chosen with regard to color; however, they must be entirely our own selection.

No. 5—12 Cactus Dahlias, good standard sorts, \$1.50; 6 for 85c.

No. 6—12 New Cactus Dahlias, comprising late introductions, \$3.00; 6 at \$1.75.

No. 7—12 Decorative Dahlias, \$1.25; 6 for 70c.

No. 8—12 Show Dahlias for \$1.25; 6 for 70c.

No. 9—6 Single Dahlias, postpaid for 75c.

No. 10—Mixed Dahlias, a general mixture containing all classes, 12 for \$1.25.

BUTZER'S DANDY DAHLIA COLLECTION.

We offer in this collection a mixture of bulbs which are untagged but represent good Dahlias, and for those who are not particular to have the names they will give fine satisfaction. Price for box of 12 good strong bulbs, \$1.00; 6 for 60c, postpaid.

Peony Dahlia Collection.

We offer six different sorts of this grand class of Dahlias in assorted colors, all labeled, for \$1.25.

BUTZER'S NEW AND MERITORIOUS DAHLIAS

Oregon Beauty—Peony. A giant in size; often 8 inches in diameter; it combines with it rare color, which is a bright fiery scarlet, overlaid with a golden sheen, the most distinct form of any Dahlia yet introduced. The opening flower is like a full decorative bloom, of a deep fiery scarlet; when fully out the color is a shade lighter, a portion of the older petals curving toward the stem, the newer petals coming out nearly flat, giving it a peony form. With its gorgeous golden sheen overlaying the whole flower, its color the brightest scarlet we have yet seen, its enormous blooms held on long stems and produced freely by a vigorous plant, it is indeed a worthy Dahlia for any garden. **Each, 50c.**

Aviator—New Cactus. A peculiar shade of rich lavender purple. Long straight petals on good stems. **Each, 35c.**

Andrew Carnegie—Peony. A new Peony Dahlia of good size, on upright stems, color a fine lively pink. **Each, 35c.**

Antoine Rivoire—Peony. Brilliant oxblood-red with crimson shading. We are much pleased with this new sort and expect it to become a leader in this class. **Each, 35c.**

Beloit—Decorative. Gigantic blooms of a rich purplish garnet, borne on extra long stiff stems. Plants strong and vigorous. **Each, 50c.**

Dawn—Cactus. New English sort of distinct color, being bright yellow at the base, gradually deepening to cerise, the tips again lightening to yellow. Flowers held upright on good stems. **Each, 50c.**

D. M. Moore—Show. We consider this the best dark show Dahlia we have yet seen. Mammoth, perfect flowers of a deep velvet maroon. **Each, 35c.**

Dorothy Peacock—Show. A splendid Dahlia for cutting. Flowers a bright sea shell pink with lighter centers, borne on strong upright stems. **Each, 35c.**

Fernand Olivet—Cactus. Immense blooms, borne freely, on stiff, wiry stems; brilliant maroon, with scarlet shading, the center almost black. **Each, 35c.**

Geisha—Peony. No garden is complete without one of these gigantic flowers; probably unequalled in size by any other Dahlia; we grew some last season nearly ten inches

across. The center is yellow, shading to variations of scarlet and gold; as the season advances they become clear yellow. The petals twist and curl, giving it a graceful fluffy appearance. **Each, 50c.**

Giant Edelweiss—Peony. The best white Peony Dahlia to date. The petals of this flower are more like the cactus class, however; the center is open and of a brilliant golden yellow. Blooms are often eight inches across and borne very profusely on a vigorous plant of neat upright habit. We recommend this very strongly. **Each, 50c.**

Le Grand Manitou—Decorative. The best striped Decorative Dahlia to date; gigantic blooms, striped and spotted with deep, reddish violet on white ground color. Held well above foliage on long, stiff stems. **Each, 35c.**

Modell—Cactus. A most effective flower, clear waxy yellow, with a delicate plum blush over the tips. **Each, 35c.**

Mrs. H. Shoemith—Cactus. We are convinced after trying several varieties of white Cactus Dahlias that this has the best form and color of any we have tested. **Each, 35c.**

Mrs. Henry Wirth—Cactus. A grand, free-blooming Dahlia, of rich geranium red, fine form; one of our best red Cactus. **Each, 25c.**

Thomas Parkin—Cactus. While not new, this is one of the best orange colored cactus Dahlias to date. **Each, 25c.**

T. G. Baker—Cactus. The best yellow cactus Dahlia we have seen. Large, well-formed flowers on stiff stems. **Each, 35c.**

Walter Deegen—New Cactus. An intense, rich, fiery red, suffused with orange. The flowers are carried on long stems. Very free flowering and one of the best novelties to date. **Each, 50c.**

Wodan—Cactus. Enormous blooms, often over 7 inches in diameter; semi-incurved, tubular petals, of delicate salmon rose color, shading to old gold in the center. **Each, 50c.**

I CAN SUPPLY ALL STANDARD VARIETIES

DAHLIA ORDERS

Will be filled during April, May, and June, but may be sent to us at any time for booking, and will be filled in the rotation received. Orders for Dahlias of \$10 or more may select 10 per cent of the amount extra in Dahlias as a premium.

NATIONAL DAHLIA SHOW.

The second annual Dahlia show of the National Dahlia Society will be held at Portland, Ore., during the month of September. Premium lists may be had from this office and further information may be had from R. W. Gill, Secretary and Show Manager, at Portland, Ore., R. 1. Plant Dahlias for the show,

GENERAL INDEX

Vegetable Seed

Page 4 to 48

	Page
Asparagus.....	4
Artichokes.....	4
Beans.....	5-6-7
Beets, Garden.....	8
Beets, Sugar.....	9
Beets, Stock.....	9
Broccoli.....	10
Chard, Swiss.....	9
Casabas.....	30
Brussels Sprouts.....	10
Corn Salad.....	10
Cress, Pepper.....	10
Cress, Water.....	10
Chives.....	10
Chicory.....	10
Chervil, Curled.....	10
Cabbage Seed.....	11-12-13-14
Cabbage Plants.....	48
Carrots.....	15
Cauliflower.....	16
Cauliflower Plants.....	48
Celery Plants.....	48
Corn, Sweet.....	18-19
Corn, Pop.....	19
Corn, Field.....	20
Cucumber.....	21
Dandelion.....	10
Egg Plant.....	22
Endive.....	22
Horseradish.....	22
Herbs.....	48
Kale.....	22-23
Kohl Rabi.....	23
Leeks.....	23
Lettuce.....	24-25-26
Myrtynia.....	26
Melons, Musk.....	26-27-28
Melons, Water.....	28-29
Mushrooms.....	30
Mustard.....	31
Nasturtium.....	31
Okra.....	30-34
Onions.....	32-33-34
Onion Sets.....	33
Parsnip.....	35
Plants.....	48
Pepper.....	35
Parsley.....	35
Peas, Garden.....	36-37
Peanuts.....	37
Potatoes.....	38
Pumpkins.....	39
Rhubarb.....	39
Ruta Baga Swedes.....	47
Radish.....	40-41
Salsify.....	41
Squash.....	42-43
Spinach.....	49
Tobacco.....	44
Tomatoes.....	44-45
Tomato Plants.....	48
Turnip.....	46

Concentrated Manures and Fertilizers

Page 91

Flower Seeds

Page 57 to 68

Grass and Field Seeds

Page 49 to 56

	Page
Alfalfa.....	52
Alsike Clover.....	52
Bent Grass.....	51
Blue Grass.....	51
Brome Grass.....	51
Bokhara.....	52
Burr Clover.....	52
Buck Wheat.....	53-56
Broom Corn.....	54
Barley.....	56
Clovers.....	52
Crested Dog's Tail.....	51
Corn, Kaffir.....	53
Chufas.....	53
Cow Peas.....	53
Emmer.....	54
Fescue.....	51
Field Peas.....	54
Flax Seed.....	56
Grass Mixtures.....	50
Grass Seeder.....	89
Hemp Seeder.....	56
Kale, 1,000 Headed.....	54
Lawn Grass.....	49
Lawn Fertilizer.....	49
Lawn Making.....	49
Orchard Grass.....	51
Oats.....	53
Pasture Mixture.....	50
Red Top.....	51
Rye Grass.....	51
Red Clover.....	52
Rye.....	54
Rape.....	55
Sweet Clover.....	52
Soya Beans.....	53
Sorghum.....	54
Salt Bush.....	54
Speltz.....	54
Sunflower.....	54
Timothy.....	51
Teosinte.....	53
Vetches.....	55
Wheat.....	53

Sprays and Spray Material

Page 77 to 88

Arsenate of Lead.....	79-87
Bug Death.....	78
Bordeaux Mixture.....	78
Black Leaf 40.....	78
Blue Stone.....	78
Formaldehyde.....	78
Grape Dust.....	78
Helebore Powder.....	78
Hose Menders.....	88
Lime Sulphur Solution.....	78
Potassium Sulphide.....	78
Paris Green.....	78
Soluble Sulphur.....	77
Spray Pumps.....	81 to 87
Tobacco Soap.....	78
Tree Pruners.....	90

Dahlias and Collections

Page 112

Poultry Supplies and Stock Foods

Page 69 to 76

	Page
Alfalfa Meal.....	69
Animal Regulator.....	71
Animal Dip.....	70
Bone, Granulated.....	69
Bone Meal.....	69
Blood Meal.....	69
Buckwheat.....	69
Barley.....	69
Calf Meal.....	75
Corn.....	69
Conkey's Remedies.....	73
Charcoal.....	69
Cow Kure.....	74
Cholera Remedy.....	71-73
Diarrhoea Remedy.....	72
Drinking Fountains.....	70-71
Egg Boxes.....	70
Egg Maker.....	71
Fly Knocker.....	74
Fly Killer.....	74
Grit.....	69
Granulated Bone.....	69
Germozone.....	74
Heave Cure.....	71
Kaffir Corn.....	69
Kow Kure.....	74
Linseed Meal.....	69
Leg Bands.....	70
Lice Killer.....	76
Millet.....	69
Nest Eggs.....	70
Oyster Shells.....	69
Oil Meal.....	69
Pratt's Remedies.....	71-72
Roup Cure.....	71
Scratch Food.....	69
Sunflower.....	69
Tobacco Dust.....	69
Tobacco Dust.....	74
Tobacco Dust.....	69-74
Wheat.....	69
Zenoleum.....	76

Nursery Department

Page 93 to 105

Apples.....	94 to 96
Apricots.....	97
Black Berries.....	102
Currants.....	104
Cherries.....	98
Gooseberries.....	103
Grapes.....	101
Nut Trees.....	105
Nectarines.....	100
Peaches.....	100
Plums.....	99
Prunes.....	99
Pears.....	97
Quince.....	98
Raspberries.....	103
Strawberries.....	104

MISCELLANEOUS

Foreign Names of Vegetables and Herbs

Page 106

Useful Tables

Page 107 to 111

1915
CATALOG OF

SEEDS

*The kind that Grow
"You can't keep them
in the ground"*

J. J. BUTZER

188-90 FRONT ST.
PORTLAND
OREGON

